DOCUMENT RESUME

ED 115 262 IR 002 806

AUTHOR	Swanson, Len; Sinnott, Loraine T.
TITLE	Information Resources for Training: A Survey of Non-Military Sources. Interim Report No. 1.
INSTITUTION	Educational Testing Service, Princeton, N.J.; Interuniversity Communications Council (EDUCOM), Princeton, N. J.
SPONS AGENCY	Advanced Research Projects Agency (DOD), Washington, D.C.
PUB DATE	5 Mar 75
NOTE	89p.; Interim Report, October 1974-March 1975 Number 1
EDRS PRICE	MF-$0.76 HC-$4.43 Plus Postage
DESCRIPTORS	Annotated Bibliographies; Catalogs; Directories; *Educational Resources; *Information Services; *Information Sources; Instructional Materials; Program Design; Program Evaluation; *Training

ABSTRACT

Resulting from a project to systematically locate existing information resources useful in the development of training courses or programs, this catalog describes 31 of the most relevant information respurces. These resources include abstracting services, computer files, directories, exchange projects, books, and information services. The catalog descriptions provide substantive data on the nature, purpose, and use of each information resource, and are intended to permit an assessment of their potential applicability to a given information need. Informal evaluations relative to the objectives of the project are included. The resources are indexed by applicability to a five-level classification of the instructional development process. (Author/LS)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

INTERIM REPORT

REPORT NO. 1

5 MARCH 1975

ED115262

INFORMATION RESOURCES FOR TRAINING:
A Survey of Non-Military Sources

by

Len Swanson
Educational Testing Service

Loraine T. Sinnott
Interuniversity Communications
Council, Inc.

APPROVED FOR PUBLIC RELEASE
DISTRIBUTION UNLIMITED

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Sponsored by

Advanced Research Projects Agency
1400 Wilson Blvd
Arlington, Virginia 22209

ARPA Order No. 2651

Contract No: MDA 903-74-C-0290

IR 008 802

EDUCOM
INTERUNIVERSITY COMMUNICATIONS COUNCIL, INC.
Princeton, New Jersey 08540

ETS
EDUCATIONAL TESTING SERVICE
Princeton, New Jersey 08540

The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the Advanced Research Projects Agency or the United States Government.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER: 1	2. GOVT ACCESSION NO. / 3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle): INFORMATION RESOURCES FOR TRAINING: A Survey of Non-Military Sources	5. TYPE OF REPORT & PERIOD COVERED: Interim Report (October 1974 - March 1975)
	6. PERFORMING ORG. REPORT NUMBER: MDA 903-74-C-0290-1
7. AUTHOR(s): Len Swanson, Educational Testing Service; Loraine T. Sinnott, Interuniversity Communications Council, Inc.	8. CONTRACT OR GRANT NUMBER(s): MDA 903-74-C-0290
9. PERFORMING ORGANIZATION NAME AND ADDRESS: Educational Testing Service and Interuniversity Communications Council, Inc., Princeton, New Jersey 08540	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS: DARPA, 1400 Wilson Blvd, Arlington, Virginia 22209	12. REPORT DATE: March 5, 1975
	13. NUMBER OF PAGES: 82
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office): same	15. SECURITY CLASS. (of this report): Unclassified
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

APPROVED FOR PUBLIC RELEASE
DISTRIBUTION UNLIMITED

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Catalog
Information Services
Information Sources
Instructional Materials
Instructional Program Development
Management of Training
Program Design
Program Evaluation
Training
Training Resources
TRAIDEX

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

The purpose of this project was to systematically locate and describe existing information resources useful in the development of training courses or programs. The project resulted in the development of a catalog describing 31 of the most relevant information resources. These resources include abstracting services, computer files, directories, exchange projects, books, and information services. The catalog descriptions provide substantive data on the nature, purpose, and use of each information resource, and are intended to permit an assessment of

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE
S/N 0102-014-6601

UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

their potential applicability to a given information need. Informal evaluations relative to the objectives of the project are included. The resources are categorized and indexed by applicability to a five-level classification of the instructional development process.

There are presently no plans to maintain the catalog; however, it will be used in a broader project to develop a system refinement and assess the feasibility of an information system supporting military training activities (TRAIDEX).

CONTENTS

	Page
INTRODUCTION	1
THE CATALOG	2
Criteria for Inclusion	2
Exclusions	2
Methodology	3
Information Collected	4
CONCLUSIONS	6
General Conclusions	6
Organizations and Commercial Sources	6
Bibliographic Data Bases and Services	7
Media Catalogs	8
Performance Objectives	8
Recommendations	9
ACKNOWLEDGEMENTS	10
APPENDIX: Catalog of Information Resources	12
Index To The Catalog	80

INTRODUCTION

This catalog is part of a feasibility assessment and system refinement for the Training Resource Applications Information/Data Exchange (TRAIDEX). The catalog had its origins in an initiative of the Interservice Training Review Board (ITRB), which was organized in 1972 to explore ways of improving the cost-effectiveness of military training through cooperative efforts among the armed services. TRAIDEX was conceived of as an information collection, storage, and dissemination service that would facilitate the interchange of new training techniques and training material resources among the service agencies. Its emphasis is on training materials development, application, effectiveness, and availability.

The TRAIDEX system is expected to provide information relative to: resource materials, including simulation devices, learning aids, and training literature; job/task analyses; education and training resource developments; and training resource applications, effectiveness, and availability. This information will be used by developers, administrators, and decision-makers responsible for the development and conduct of individual military training programs or projects.

In 1974 the ITRB requested support from the Advanced Research Projects Agency (ARPA) on a matching funds basis with the four major services for a feasibility study and refinement of the TRAIDEX system concept. Part of this refinement is a determination of the existing sources of information that might be included in, or accessed through, TRAIDEX. It was felt that a number of useful information resources already exist, both within and outside of the military, and that these resources should be assessed against the TRAIDEX users' needs. Educational Testing Service and the Interuniversity Communications Council, Inc. (EDUCOM) were assigned the responsibility of providing this assessment.

THE CATALOG

This catalog represents an attempt to systematically locate and describe existing information resources for training. The catalog is limited to resources developed and operated outside the military community; a second survey will deal with information resources of the various agencies of the Department of Defense.

Criteria for Inclusion

The catalog contains citations to a variety of different types of information resources. Our working definition of "information resource" was: any systematically organized collection of information, whether computerized or not, from which a TRAIDEX user might obtain either answers to specific questions about training resources or citations to sources of information about training resources. The format of an information resource can be a computer tape or file, a book, a catalog, a directory, or simply a list, such as a bibliography. It can also be an information product of an organization, or an information service.

"Training" is distinguished from education generally by being a subset in which instruction has well-defined performance objectives, or is directed toward specific competencies. While the emphasis of TRAIDEX is on technical training, other types of training were not excluded.

The determination of whether or not an information resource relating to training should be included was based on its potential usefulness in the development of a training course or program. For this purpose, the following breakdown of the instructional development process was used:

1. Instructional management and planning, including identification of instructional needs, development of priorities, organization of personnel, etc.

2. Analysis of instructional problem, including review of discipline and existing courses, identification of student entry conditions, etc.

3. Design of instructional program, including task analysis, development of instructional objectives, and selection of instructional strategies.

4. Development of instructional program, including selection of equipment and media.

5. Evaluation of instructional program.

This breakdown also provided a structure for locating and classifying information resources which meet the criteria for inclusion.

Exclusions

Items specifically excluded from the catalog were: information resources

developed or operated within the military community, resources which are exclusively subsets of larger resources, or are duplicated by more comprehensive ones, and resources which provide too little information to be of practical use. For example, a list of audio-visual equipment manufacturers would not be considered unless it contained useful annotations or evaluative data. Commercial catalogs of educational materials were also excluded, but an annotated list of such catalogs would be considered. Wherever possible "higher level" resources were favored; for example, collections of abstracts or citations to articles on educational research rather than the articles themselves, or a directory of organizations as opposed to individual organizations.

There are numerous textbooks and other materials that are useful to those involved in program design and development; for example, handbooks which provide guidance in media selection, or workbooks on formulating instructional objectives.

An estimate of the number of such materials is given by Paul D. Hood in "The Domain of R & D Training Resources" (ERIC/ED-087-706). Such materials were excluded from the catalog, since they do not qualify as catalogs or directories, but are referenced through guides or indexes. An unannotated list of recommended materials in this area is provided by Hood in "Recommended Books and Monographs" (ERIC/ED-087-707).

Finally, resources which provide information relevant to education, but only marginally to training, were excluded, as were resources which would be of little practical use in the instructional development process (as outlined above).

Methodology

A variety of sources were used to identify and obtain information about potential catalog entries. Among them were library reference materials, computer search services, books and periodicals on education, and people. The basic approach was to isolate the information categories relevant to each step in the instructional development process and then attempt to locate materials which would be useful to a person engaged in any stage of this process. Thus, we spoke with a number of people who have responsibility for one or more aspects of the instructional development process in order to find out what information resources they used or knew about. We also talked with people who have a broad knowledge of the fields of education, training, or information systems.

The following types of library sources were examined in order to locate or research specific entries:

- Information collections, such as ERIC, NTIS, and the Encyclopedia of Information Systems and Services
- Reference sources, such as guides to the literature, reference books, and reference book review services
- Books on information retrieval; books on education and training

- Periodicals and newsletters (e.g., Journal of Chemical Documentation)
- Directories such as LIST and various surveys of data bases, including two compilations done by ETS/EDUCOM
- Bibliographic sources, such as Computing Reviews.

Only U.S. sources were specifically researched. Periodical sources, such as ERIC, were generally examined for the period January 1970 through December 1974. It was felt that if an information resource had not been cited since 1970 it would likely be out of date and therefore of little use.

Most of the information contained in the catalog was obtained from indirect sources such as those described above. Where appropriate we also contacted the responsible organization to get further information.

Information Collected

Each catalog entry contains a general description of the resource, characteristics associated with its relevance or applicability to TRAIDEX, and an informal evaluation. In general, the attempt was to present the most important or useful data for deciding which resources merit consideration for inclusion in or access through TRAIDEX. The goal was also to see what types of information are already available to those involved in training.

The following data was sought for each catalog entry. Where an item was inapplicable for a particular entry it was omitted.

Name. Name of the information resource.

Publisher. Owner, operator, or publisher of the resource.

Author/compiler. Author or developer of the resource.

Keywords. Keywords associated with the resource, if provided by the author.

Description. General description and purpose, and where appropriate, availability, published format, frequency of issue, and special features.

Entry information (resources/services). Types of items included, training areas covered (if specific), and information given about each item.

Criteria for inclusion. Criteria for selection of items and specific exclusions, if any.

Size. Present total number of items or citations.

Growth. Approximate net number of items added per unit time.

Updating procedures. Frequency, sources of information, editing procedures, and volume of activity per unit time.

Technical information. Where appropriate this includes storage medium, computer specifications, documentation/consultation availability, software used, transportability, and machine dependency.

Typical user. Audience for whom the information resource is intended.

Potential use within TRAIDEX. Types of activities for which the resource would be useful. If applicable, mode of use.

Cost data. Subscription or use charges.

Evaluation. Informal evaluation for inclusion in TRAIDEX (see factors below).

Sources of information. Source(s) of information for catalog description, or for further reference.

The informal evaluation made of each catalog entry is intended to highlight the factors which make it particularly appropriate, or inappropriate, for inclusion in TRAIDEX. No attempt was made to do a rigorous comparative evaluation. The evaluation factors used were the following:

1. Relevance to training
2. Presence of important or unique data elements (such as evaluations of the cited entries)
3. Completeness/comprehensiveness
4. Proportion of entries specifically relevant to training, as opposed to other interests
5. Ease of use/computer support
6. Provisions for continued updating, as opposed to a one-time collection of data

Only those factors which are particularly relevant to a given entry were mentioned.

CONCLUSIONS

It became clear early in the study that a large number of information resources relevant to training exist. There are numerous attempts to collect information on a continuing basis, such as at ERIC and NTIS. There are special-audience abstracting services, such as at the Center for Vocational and Technical Education, that deal with training resources. There are one-time catalogs containing useful information, such as Materials for Occupational Education. There are special bibliographies containing citations to training literature, such as those produced by ERIC and the Human Resources Research Organization. Finally, there are catalogs of services or facilities provided by private or commercial training centers, and by firms producing training support materials.

The area surveyed is an extremely broad one: clearly anything related to educational methods or materials can be relevant to training. If the TRAIDEX data bank is to be manageable it must be narrowed down by focusing on the more comprehensive and useful training-related information resources and by utilizing the higher-level resources - that is, those that systematically classify and describe other information resources. A complete itemization of all training-related catalogs and directories would number in the hundreds, if not the thousands.

Many of the important training-related information resources are difficult to locate, partly because they are not well publicized. The normal retrieval channels, such as ERIC, often do not identify them. This is due in part to the broad definitions of "information resource" and "training" (an ERIC search on all relevant terms would produce hundreds of irrelevant citations). In addition, many of the resources are not cited in systems such as ERIC because of their specialized nature.

Finally, many potentially useful information resources are directed toward special audiences unrelated to military training, or toward special geographic areas. For example, the Center for Research on Learning and Teaching at the University of Michigan has proposed a directory of unique learning resources for higher education within Michigan. Several states have developed directories of continuing or vocational education within their boundaries. Such information resources as these are unlikely to be readily known within the military.

Organizations and Commercial Sources

Another broad area of information availability lies in professional associations and the commercial sector. Several organizations provide curriculum kits and other instructional materials directly related to training: the American Technical Education Association, the American Vocational Association, the Center for Research and Leadership Development in Vocational and Technical Education, the American Management Associations, the Military Testing Association, and the American Society for Training and Development. There are over 600 organizations which supply books, periodicals, and other media related to occupational education.

The American Society for Training and Development (ASTD), in particular, provides a number of information services that are of importance to those involved in training. One of them is the Member Inquiry Service, which is a telephone service through which members can obtain answers, references, or referrals relative to a specific question (the American Management Associations, among others, provides a similar service). ASTD also has a number of special interest groups in various training areas.

A number of private firms maintain training centers and produce catalogs of courses and facilities. Two of the larger ones are Western Electric and IBM. Other commercial firms, such as RCA, produce performance objectives and other curriculum materials. There are also numerous schools of continuing education, commercial and correspondence schools, and vendors of educational materials. All are potential sources of training information.

The approach taken in this survey was to attempt to locate catalogs or directories of such organizations, rather than to include each organization separately. Thus, organizations are not themselves listed in this catalog; however, products or services which are identified with and accessed through an organization are sometimes listed under the organization name (e.g., HumRRo). In the process, a useful collection of task analyses, or media evaluations, or evaluation measures may have been lost; however, it is hoped that the result is a more systematic and manageable catalog of the important information resources.

Bibliographic Data Bases and Services

In assessing the content to be covered in a training course, the subject matter specialist may desire state-of-the-art information within his discipline area. A variety of bibliographic data bases which will provide this information exist, and the number of such bases is constantly increasing. Many of them provide abstracts of the articles they cite; many of them can be searched both manually and by computer.

Paralleling the growth of bibliographic data bases is the emergence of organizations which search them. Services by these organizations include current awareness and/or retrospective searching.

The National Bureau of Standards is developing a promising scheme for keeping an updated record of machine-readable data bases. NBS is building a catalog (which will itself be machine-readable) of both bibliographic files and data banks, and of the organizations which search them. A prototype of the catalog is described in NBS Technical Note 814, A Mechanized Information Services Catalog. NBS has also conducted a study of the major university-based retrieval systems (Technical Note 781).

A useful tool in locating files and search services is the Encyclopedia of Information Systems and Services, Anthony T. Kruzas (Ed.). A useful tool in keeping abreast of new developments in search services and data bases is the serial publication Information News and Sources (Science Associates/International, Inc.).

Media Catalogs

The indexing of non-print media is in an amorphous state. New tools are frequently published to join the many tools which presently exist. Keeping up with the proliferation of such tools becomes an arduous task. Generally, those which tend toward comprehensiveness, such as the NICEM products or the Index to Instructional Media Catalogs, fail to provide information that would allow the reader to make effective media choices (e.g., the instructional objectives of or evaluative data about the media they index); these indexes can only be used to make the reader aware of the existence of potentially applicable products. Those tools with adequate information about their entries are seldom comprehensive.

Surveys of media indexes provide those who seek indexes with an overview of available tools, allowing them to efficiently locate media indexes which fulfill their needs. An example of such a survey is Margaret E. Chisholm's Media Indexes and Review Sources. The first chapter of this 1972 publication gives a concise evaluative survey of many media selection tools.

Ideally, the author of a survey document should comprehensively survey the field of media tools with respect to some stated criterion. Also he should provide for a means of periodically updating his survey. In addition to factual data, such as the types of media indexed by the tool, the subject matter covered by the tool, and the audience to whom the media in the tool applies, information given by the survey about its entries should include the uniqueness of the media index, the accuracy of the index, the index's comprehensiveness, the information provided with each item cited by the index, and the frequency with which the index is updated.

We have not been able to locate a survey document possessing all of the above characteristics while citing a group of media indexes of interest in military training program development, but believe the one we have entered in our catalog, A Comparison of Guides to Non-Print Media, comes closest to approaching both of these ideals.

Performance Objectives

There are many projects involved in disseminating formulated objectives. One of interest to military training because of its relevant subject domain is Project V-TECS (Vocational-Technical Education Consortium of States). The goal of this project is to produce catalogs of performance objectives and criterion related measures in occupational education.

Formulated objectives are available in large numbers. In the process of determining the availability and general quality of occupational objectives for VTECS, Raymond G. Wasdyke of the Educational Testing Service collected some 40,000 performance objectives (Occupational Performance Objectives State of the Art Study, Final Report, 1974). In a 1972 national survey covering a broader range of subject areas, Michael G. Kuhn and Loraine R. Gay identified some 100 pools which held available objectives (Instructional Objectives: A National Compendium, ERIC-ED 062 743).

Limiting the value of formulated objectives in their poor quality. Wasdyke found the majority of his items to be incompletely written or not formally validated. One can safely infer that this evaluation applies to the population of available objectives.

Recommendations

Because of the large number of potentially useful information resources, and the massive amount of relevant data, it seems clear that if TRAIDEX is to provide access to this information it will have to be a pointer system, rather than a repository of the data. Thus, in responding to a specific inquiry it will direct the user to an appropriate information resource from which he can obtain an answer to his question. Many of the information resources provide their own retrieval services, so that in any case development of an additional search capability would be redundant. Such a pointer system would be highly useful since an easy means of locating these information resources is presently lacking.

In discussions with practicing curriculum planners, developers, and evaluators we observed that they relied to a large extent on people resources for obtaining needed information. Associates, correspondants, and professional society referrals usually provided the means of locating appropriate people to whom a question could be put. This argues for a referral service on the model of the National Referral Center. TRAIDEX could direct users to the people most knowledgeable about the existence of the needed types of information. This would also help ensure that the user has access to the most up-to-date knowledge about his area of interest.

ACKNOWLEDGEMENTS

This project was supported by the Advanced Research Projects Agency under Contract No. MDA 903-74-C-0290. The authors wish to acknowledge this support, as well as the assistance of numerous people who gave generously of their time in helping us locate many of the catalog entries. Special thanks go to Jack Ellis of the Western Electric Learning Center, Pam Rosen and her staff at the ETS Test Collection Center, Samuel Ball, Ben Shimberg, and others of ETS, Karl Zinn of the Center for Research on Learning and Teaching at the University of Michigan, Brad Mintener and Robert Craig of the American Society for Training and Development, Robert Morgan of the Center for Occupational Education at North Carolina State University, John Snyder of the National Science Foundation, David Trivett of the ERIC Clearinghouse for Higher Education, Paul Schroeder of the Center for Vocational and Technical Education, and Gertrude Sinnott of the Rider College Library. Special thanks also go to Jean Lu of EDUCOM for her patience and diligence in typing the manuscript.

The opinions expressed in this report are the sole responsibility of the authors. So also are any inaccuracies in descriptions of the information resources cited; while some of the information was obtained first-hand, in the interests of economic practicality we did not verify the accuracy and up-to-dateness of every entry. We trust, however, that the inaccuracies are minor and that the catalog will serve a useful and important purpose.

CATALOG OF

INFORMATION RESOURCES

(listed alphabetically by title)

ALPHABETICAL LIST BY TITLE

	Page
Abstracts of Instructional and Research Materials in Vocational and Technical Education	12
Battelle Memorial Institute	14
Catalog of National Institute of Educational Products	16
Clearinghouse for Applied Performance Testing (CAPT)	18
Comparison of Guides to Non-Print Media	19
Computer Education and Training Reference Guide	21
Council for Educational Development and Research (CEDaR)	23
Curriculum Materials Clearinghouse (CMC)	27
Education Index	29
Educational Administration Abstracts	30
Educational Media Yearbook - 1974	32
Educational Products Information Exchange (EPIE) Institute	35
Educational Resources Information Center (ERIC)	37
Educational Testing Service Test Collection (ETSTC)	42
Encyclopedia of Educational Evaluation	44
Encyclopedia of Educational Research (Fourth Edition)	46
Guide to the Evaluation of Educational Experiences in the Armed Services	48
Human Resources Research Organization	51
Learning Resources Directory	53
Materials for Occupational Education	55

	Page
Mental Measurements Yearbook (MMY)	56
National Referral Center	58
National Technical Information Service	60
Psychological Abstracts Information Service	63
Registry of Research and Investigation in Adult Education - 1972	65
Science Teaching Center	67
Smithsonian Science Information Exchange	70
Task Inventory Exchange	72
Training Methodology	73
Vocational Instructional Materials Available from Federal Agencies	74
Vocational-Technical Learning Materials: Books and Manuals for Schools and Community Colleges, Second Edition	77

ABSTRACTS OF INSTRUCTIONAL AND RESEARCH MATERIALS IN VOCATIONAL AND TECHNICAL EDUCATION

AUTHOR/PUBLISHER: The Center for Vocational and Technical Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210

DESCRIPTION: The Center for Vocational and Technical Education is an independent unit on The Ohio State University campus. Its mission is to strengthen the capacity of state educational systems to provide effective occupational education programs consistent with individual needs and manpower requirements. One of its principal activities is the collection and publication of abstracts of documents dealing with vocational-technical education. The Center formerly published two quarterly volumes: Abstracts of Instructional Materials in Vocational and Technical Education (AIM) and Abstracts of Research Materials in Vocational and Technical Education (ARM). They now publish a single volume, Abstracts of Instructional and Research Materials in Vocational and Technical Education (AIM/ARM). AIM/ARM is published six times per year, and is indexed by subject, author, and document number. Index terms used in the subject index are ERIC descriptors.

AIM/ARM also provides abstracts of research projects in progress. Included are projects currently underway which have been funded by Public Law 90-576, Part C. These abstracts are intended for researchers and practitioners who need to keep aware of current developments in their field.

AIM/ARM is published under a contract with the Bureau of Occupational and Adult Education, U.S. Department of Health, Education and Welfare.

ENTRY INFORMATION: AIM/ARM contains abstracts of reports and documents dealing with instructional materials, methods, and research. Each abstract contains the following types of information: the Center's identifying accession number; the ERIC (RIE) number, if any; author(s); title; institution and sponsoring agency; report number, bureau number, grant number, contract number, and program area number, if any; EDRS price; other available source of document, if any; publication date and number of printed pages; ERIC descriptors; identifiers; and the abstract. Where applicable the abstract includes the means of development, teacher competency, student requirements, description of supplementary materials, research purpose, procedures, results, and conclusions.

CRITERIA FOR INCLUSION: No objective criteria are applied relative to content other than general usefulness to the intended audience.

SIZE: The AIM/ARM data base now contains over 16,000 abstracts.

GROWTH: Each issue of AIM/ARM includes approximately 200 abstracts, for a total growth of approximately 1200 abstracts per year.

UPDATING PROCEDURES: The Bureau of Occupational and Adult Education provides copies of all reports, including preliminary and interim reports, of projects funded under Public Law 90-576, Parts C, D, I, and F. State departments of education, through their research coordinating bodies, also provide copies of reports of projects they fund. In the past the Center also obtained materials from the ERIC vocational-technical clearinghouse (which has since been subsumed under the Career Education clearinghouse). In the future the Center expects to broaden its search to include publishers and other sources.

The data base is now updated six times per year. Abstracting is done by the Center unless the author has provided a suitable abstract.

TECHNICAL INFORMATION: The AIM/ARM abstracts are available on tape (six tapes per year). The Center has an in-house retrieval system and provides search services on an informal basis. Searching is also provided by the Lockheed Dialog Search Service.

TYPICAL USER: AIM/ARM abstracts are designed for teacher or student classroom usage, and for curriculum planners and developers who need access to materials and other information on classroom instruction.

POTENTIAL USE WITHIN TRAIDEX: AIM/ARM would be of use within TRAIDEX for materials selection and background research. Its role in the instructional development process would be primarily in the design and development of instructional programs.

COST DATA: The AIM/ARM printed publication costs $34 per year ($36 for foreign subscriptions), including a yearly cummulative index. The tapes cost $250 per year ($150 if user supplies tape) for six reels.

EVALUATION: AIM/ARM has excellent potential for use within TRAIDEX. A large proportion of its information coverage is clearly relevant to training, and the data base is continually updated. Computer support is available, and the publication is easy to use. The coverage does not appear to duplicate other sources; for example, over 90% of the entries do not appear in ERIC. While the cited entries are not evaluated, their availability is noted in the citation.

SOURCES OF INFORMATION: (1) Examination of publication; (2) The Center for Vocational and Technical Education, (614) 486-3655.

BATTELLE MEMORIAL INSTITUTE

LOCATION: 505 King Avenue
Columbus, Ohio 43201
Telephone: (614) 299-3151

DESCRIPTION: Battelle is a not-for-profit corporation which began operations in 1929. It engages in a broad range of research, educational, and industrial development activities. Battelle's research interests embrace the physical, life, and social sciences. This research extends from basic studies to applied programs directed toward new products and processes. Much of it is supported by industrial concerns and Government agencies on a contract basis. In addition to its Ohio Laboratories, Battelle has facilities in other parts of the United States and Western Europe.

A sophisticated on-line information retrieval system, BASIS-70, is operated by Battelle. A number of files are maintained on the system, including a data base containing 200 task descriptions from 23 Counselor-Managers, Counselors, and Clerk-Typists working in 11 service teams in the field of vocational rehabilitation. Although this file may be of some interest to TRAIDEX users, the files maintained on the system typically are data files unrelated to training.

Battelle houses a number of information centers. Two of special interest to TRAIDEX users are located on the Ohio site - the Diver Equipment Information Center (DEIC) and the Tactical Technology Center (TACTEC).

With U.S. Navy support, DEIC was established as an aid to the design and use of diving and related equipment. The services provided by DEIC include data collection and analysis, literature searching, abstracting, state-of-the-art compilation, answering specific queries, and technical assistance.

Maintained by ARPA funds, TACTEC collects, stores, analyzes, and disseminates information concerning technology related to tactical warfare. Services provided by TACTEC also include answering specific queries, literature searching, preparing technical summaries, and technical assistance.

ENTRY INFORMATION: DEIC's interests include underwater life support equipment, physiological data, salvage gear, deck machinery, habitats, submersibles, and underwater tools. DEIC maintains a comprehensive collection of reports, articles, patents, manufacturers' literature, specifications and standards, and equipment operating and maintenance manuals. Approximately 8000 U.S. and foreign references are abstracted on 5 by 8 inch cards and filed by clue words, authors, and organizations.

TACTEC's interests cover the entire spectrum of tactical warfare: weapons, munitions and armor; mobility and logistics; operations analysis; surveillance, communications and electronics; socio-technical sciences and ecological sciences. It maintains some 30,000 documents, 2000 bound volumes, and 50 periodical subscriptions.

CRITERIA FOR INCLUSION: DEIC collects both published and unpublished literature, and military, federal, and industrial specifications and standards. The main input to TACTEC is from the Defense Documentation Center and reports from the Department of Defense and its contractors. Personal interviews are also collected by TACTEC.

TECHNICAL INFORMATION: The holdings of both TACTEC and DEIC are in hard-copy.

TYPICAL USER: Battelle staff members and qualified outside requesters use DEIC's resources. Use of TACTEC is limited to ARPA, other DOD agencies, and DOD contractors.

POTENTIAL USE WITHIN TRAIDEX: Both DEIC and TACTEC can provide TRAIDEX users with state-of-the-art assessments in areas covered by their information holdings. These assessments can be used as resource materials in training-course design or modification. DEIC's collection of manuals provides a source of training materials for diving-related coursework.

COST: The cost of services from DEIC and TACTEC depends on the extent of assistance requested.

EVALUATION: TACTEC's holdings are relevant to all military agencies and a range of training courses. DEIC's holdings are of more limited interest. Both provide a current source of information about their subject domains and services which assure the availability of this information to qualified users.

SOURCE OF INFORMATION: Encyclopedia of Information Systems and Services
Anthony T. Kruzas (Ed.)
Anthony T. Kruzas Associates (1974)

Battelle - The President's Report and Annual Review: 1970
Battelle Memorial Institute

BASIS - 70 - A User Guide (2nd Edition)
Battelle Memorial Institute

CATALOG OF NATIONAL INSTITUTE OF EDUCATION PRODUCTS

DEVELOPER: Division of School Practices and Services
Office of Dissemination and Resources
National Institute of Education
Contact: Larry Hutchins or Mildred Thorne
(202) 254-5868

DESCRIPTION: All National Institute of Education contractors are being asked to submit extensive reports of educational products which have emerged or will emerge by November 30, 1975 from their NIE funded projects. These reports will be compiled into a product catalog and published in the summer of 1975.

The Division of School Practices and Services has formulated the following description of the type of item they consider a product: any tangible outcome from a project that can be used in an educational setting to improve or facilitate the educational process. For example, the Division is interested in reports of curriculum materials, test and measurement instruments, computer-assisted instruction programs, administrative procedures, staff training materials, model programs, guides, and so forth.

The Catalog will probably be available through the Government Printing Office.

ENTRY INFORMATION: The contracting agency is requested to submit extensive information about the products it reports, including as much evaluative data that has been collected. Details of the format of the report and the types of information it should include have been formulated by the Division. It is expected that each product citation will be about 6 single-spaced pages in length.

CRITERIA FOR INCLUSION: Products cited must be available by November 30, 1975. Also, they must satisfy the following criteria:

1. They must be of interest to the educational practitioner. Such things as interim, progress, or planning and design reports of interest only to the researcher will not be included.
2. They must be transportable to or reproducible at other geographical sites.
3. They must be self-contained. For example, part of an instructional system will be included in the catalog as a stand-alone entry only if it may be used as a stand-alone instructional resource in the classroom.

SIZE: There are 300 to 400 NIE contractors and all will be asked to submit reports. The catalog is expected to contain 400 entries.

UPDATING: Present plans include an annual updating of the catalog.

TECHNICAL INFORMATION: The catalog will be available in hardcopy. It may be issued as several volumes.

TYPICAL USER: It is expected that educational practitioners will find the catalog useful in locating educational products. The information provided with each entry will be extensive enough to allow the user to adequately

judge whether the cited product fulfills his needs. Also, it is expected that members of Congress will find the catalog useful in assessing NIE activities.

POTENTIAL USE WITHIN TRAIDEX: Because NIE mainly supports research and development in primary and secondary education, many of the products cited will not be relevant to military training programs. The catalog will, however, contain products that can be used, perhaps with modifications, in military training programs, and, thus, can be used to retrieve these products. At present, the number of such products cannot definitely be determined.

EVALUATION: If agencies supply the information they are being requested to provide, the catalog will be an excellent resource guide. Since NIE supports a wide-ranging research and development program, the catalog will include a variety of products useful to military training programs, within the limiits discussed above.

SOURCE OF INFORMATION: Mildred Thorne
Division of School Practices and Services
Office of Dissemination and Resources
National Institute of Education
(202) 254-5868

CLEARINGHOUSE FOR APPLIED PERFORMANCE TESTING (CAPT)

LOCATION: Northwest Regional Educational Laboratory
710 S.W. Second Avenue
Portland, Oregon 97204

DESCRIPTION: CAPT was created in July 1974. Its purpose is to establish a mechanism for rapid access to, and dissemination of, applied performance testing devices and procedures.

Of interest to the Clearinghouse are testing devices which allow for the measurement of a task in an actual or simulated performance setting. Clearinghouse activities include: surveying and synthesizing available procedures, materials, and instrumentation designed specifically for applied performance assessment; collecting and disseminating information and materials about applied performance testing; developing and evaluating instructional materials covering concepts related to applied performance testing; and developing guidelines for evaluating applied performance testing devices and procedures.

PRODUCTS/SERVICES: CAPT produces a bimonthly newsletter on applied performance testing. The goal of the publication is to establish and maintain a communication network among those parties interested or working in the field.

Documents related to applied performance testing and bibliographies of existing testing devices and procedures will also be prepared by CAPT.

CRITERIA FOR INCLUSION: The measures of interest to CAPT must be suitable for use in public schools. Two categories of applied performance tests that would not be suitable for Clearinghouse inclusion are (1) measures specifically designed for an audience which would not be adaptable for public school students, and (2) measures constructed to measure performance of tasks unrelated to public school curricula.

TYPICAL USER: Primary, intermediate, and secondary school practitioners and researchers interested or involved in applied performance testing.

POTENTIAL USE WITHIN TRAIDEX: CAPT may be contacted or its products surveyed when information about past and ongoing activities in applied performance testing applicable to the measurement of training outcomes is desired.

EVALUATION: The Clearinghouse will concentrate its collection efforts on measures of marginal or no interest to military training. However, this should not impair its ability to point TRAIDEX users to potentially useful sources of information about performance tests and testing.

SOURCE OF INFORMATION: CAPT Newsletter
Volume I, Issue I
November, 1974

A COMPARISON OF GUIDES TO NON-PRINT MEDIA

AUTHOR: David E. Rawnsley

SPONSOR: National Institute of Education, Washington, D.C.

DESCRIPTION: This 1973 report provides comparative information about the various indices, guides, catalogs, and similar publications which describe instructional materials - films, video and audio tapes, programmed materials, games, and so forth. Thirty of the sixty six entries in the report are publications that deal exclusively with one of the following subject areas: ecology, ethnic studies, guidance, health and drug abuse, the sciences and technology, teacher training, and vocational education.

ENTRY INFORMATION: Sources for entry information included secondary descriptions of the publication and/or direct examination of the entry. The COMPARISON is divided into two main sections, publications which cover a number of subject areas and those which cover only a single area. The following information is given about the entries: the type of media covered by the guide, the educational level to which it is pertinent, its price, the frequency of its publication, bibliographic information, and a brief abstract. In addition, notation is made of whether it contains publication dates, designates the intended audience, gives running times, provides content summaries and evaluations for its citations, and names the producers, distributors, prices, and conditions of availability of the materials which it indexes.

CRITERIA FOR INCLUSION: Entries were gathered primarily, but not exclusively, from an extensive search of Research in Education, the index to the ERIC document collection. No publications published before 1970 have been included unless they have been updated. No indices to non-print materials in specialized areas which would appear to have limited use to the general educational community have been included.

SIZE: 66 entries

UPDATING: In the report, Rawnsley specifies no plans for updating the survey.

TECHNICAL INFORMATION: The report is available in hardcopy and microfiche.

TYPICAL USER: The publication is directed to those who are reponsible for building, expanding, or maintaining an up-to-date multi-media resource library within an educational system.

POTENTIAL USE WITHIN TRAIDEX: If the TRAIDEX user is searching for a non-print media guide possessing certain attributes, the COMPARISON and publications like it are useful tools.

COST DATA: The report is available through the ERIC reproduction service: MF $.65, HC $3.29, ED 083 837

EVALUATION: Tools like the COMPARISON are of great value to those searching for sources of media information, especially when the number of such sources is large, as is the case with media indices. The COMPARISON provides adequate

descriptions of the publications it surveys. The descriptions lack evaluative comments, such as the comprehensiveness or timeliness of the index. Another deficiency in the report is its lack of provisions for updating. Many of the items cited are single editions which will soon be superseded by new publications. The COMPARISON is not comprehensive and should be used along with other media index guides.

SOURCE: Examination of document.

COMPUTER EDUCATION AND TRAINING REFERENCE GUIDE

PUBLISHER: Edumatics Corporation
P.O. Box 36
Oceanport, New Jersey 07757

DESCRIPTION: This guide lists commercially available products and services in the field of computers and education. It contains descriptive information whenever possible and comparison charts to enable the prospective user to make a preliminary evaluation of the capabilities of various products and services. The guide first appeared in 1971 and is updated irregularly.

ENTRY INFORMATION: The guide is organized into seven major sections. The first provides an introduction to the use of the guide. The other sections contain reports on electronic computers designed for or adapted for use in teaching computer concepts; hardware devices, software packages, or instructional aids designed to assist the instructor and facilitate instruction in computer concepts; schools, courses, and seminars capable of meeting particular computer training requirements; systems using electronic/computer technology to present educational subject matter (including but not restricted to computer concepts); consulting services related to computer education, administrative data processing services and software packages, and time-sharing services offering instructional or administrative support for educational activities; and background information on companies offering the products and services listed.

Information is provided by the company whose product or service is described. Report sheets describing products and services have the same general format: a summary description, a more extensive and technical description, and general information about the entry's instructional use. The section on company background information gives prices for products and services where available.

The guide is indexed by company. A table of contents introduces each section and indicates the date of entry of the information.

CRITERIA FOR INCLUSION: Products and services are listed only if they possess unique educational characteristics; products that must be adapted to an educational environment are not included. A basic file of potential contributors and surveys of the trade literature determine the companies solicited for only those contributions. Only those companies supplying sufficient product and service information are entered.

SIZE AND GROWTH OF BASE (as of December, 1973): The number of entries provided in each section describing products or services ranges from 12 reports of systems utilizing electronic/computer technology to present subject matter, to about 65 reports of schools, courses, or seminars related to computer training. The majority of listings were entered in July and December, 1971. About 60 companies are listed, 15 of which have been added since the Guide's first issue. A supplement presently in progress will add approximately 6 new companies and their products and services, while deleting several of the companies already listed.

TECHNICAL INFORMATION: The Guide is available in loose-leaf binder.

TYPICAL USER: Educators, educational administrators, and directors of training within industry.

POTENTIAL USE WITHIN TRAIDEX: The guide can be used to locate hardware and software instructional aids useful in teaching computer concepts.

COST: The most recent version of the guide is available from Edumatics for $47.50. When issued, supplements range from $10.00 to $17.50.

EVAULATION: The value of the Guide within TRAIDEX is its assistance in locating hardware and software designed for the instruction of computer concepts. The Guide is not comprehensive but will facilitate a preliminary search for materials. Since the Guide is updated infrequently, the information given may be obsolete.

SOURCE OF INFORMATION: Review of Guide and conversation with Alan Salsbury, Edumatics, (201) 542-0990.

COUNCIL FOR EDUCATIONAL DEVELOPMENT AND RESEARCH (CEDaR)

LOCATION: Suite 206
1518 K. Street, N.W.
Washington, D. C. 20005

DESCRIPTION: CEDaR functions as a clearinghouse and disseminator of information regarding activities and products of its member institutions. It also monitors government activities related to education for its member institutions. Membership includes major educational research and development centers and educational laboratories.

Two information products of CEDaR are a serial publication called D & R Report and an annual CEDaR Catalog. D & R Report describes an array of CEDaR member programs and program results. It is infrequently issued and available at no cost from CEDaR.

The annual CEDaR Catalog is a more systematic effort to describe programs underway within CEDaR-member institutions and major products resulting from these programs. It was last issued in 1974 (4th edition). CEDaR does not plan to reissue the Catalog.

The following is a list of the centers and laboratories which are CEDaR members.

Center for Research and Development in Higher Education
University of California, Berkeley
2150 Shattuck Avenue, Fifth Floor
Berkeley, California 94704

Center for Social Organization of Schools
The Johns Hopkins University
3505 North Charles Street
Baltimore, Maryland 21218

Center for Educational Policy and Management
University of Oregon
1472 Kincaid
Eugene, Oregon 97401

Center for the Study of Evaluation
University of California, Los Angeles
Graduate School of Education
145 Moore Hall
Los Angeles, California 90024

Learning Research and Development Center
University of Pittsburg
160 North Craig Street
Pittsburg, Pennsylvania 15260

Research and Development Center for Teacher Education
University of Texas, Austin
Education Annex 3.203
Austin, Texas 78712

Stanford Center for Research and Development in Teaching
Stanford University
School of Education
Stanford, California 94305

Wisconsin Research & Development Center for Cognitive Learning
University of Wisconsin, Madison
1025 West Johnson Street
Madison, Wisconsin 53706

Appalachia Educational Laboratory, Inc.
P. O. Box 1348
Charleston, West Virginia 25325

Central Midwestern Regional Educational Laboratory, Inc.
3120 59th Street
St. Louis, Missouri 63139

Center for Occupational Education
North Carolina State University
P. O. Box 5096
Raleigh, North Carolina 27607

Center for Vocational and Technical Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

Education Development Center, Inc.
55 Chapel Street
Newton, Massachusetts 02160

Far West Laboratory for Educational Research and Development
1855 Folsom Street
San Francisco, California 94103

Mid-Continent Regional Educational Laboratory
104 East Independence Avenue
Kansas City, Missouri 64106

National Laboratory for Higher Education
Mutual Plaza
Durham, North Carolina 27701

Northwest Regional Educational Laboratory
700 Lindsay Building
710 S. W. Second Avenue
Portland, Oregon 97204

Research for Better Schools, Inc.
Suite 1700
1700 Market Street
Philadelphia, Pennsylvania 19103

Southwest Educational Development Laboratory
211 East Seventh Street
Austin, Texas 78701

Southwestern Cooperative Educational Laboratory, Inc.
229 Truman, N.E.
Alburquerque, New Mexico 87108

Southwest Regional Laboratory
4665 Lampson Avenue
Los Alamitos, California 90720

ENTRY INFORMATION: The CEDaR Catalog - 1974 is a two-volume summary of the major programs underway (as of April, 1974) within the CEDaR-member institutions*, and the major products resulting from these efforts. Volume I is devoted to descriptions of the programs and of the completed and available products. Volume 2 is limited to anticipated products.

Each program listing includes the page numbers of the program's completed and anticipated products that are also listed in the catalog, an extensive program abstract, and the name of the contracting agency. Each completed product listing includes a detailed abstract, the target audience, the price, the principal investigator, and information about the availability of evaluative data and of documentation about the product. The anticipated product listing is similar to the available product listing, but also includes the date of product availability and the state of its development.

SIZE: D & R Report is usually between 20 and 25 pages in length. The CEDaR Catalog - 1974 includes 250 available products and 162 anticipated products. About 100 program descriptions are included.

UPDATING PROCEDURE: The CEDaR Catalog will not be reissued. D & R Report will be reissued, but has no definite dates of publication.

TECHNICAL INFORMATION: Both the Catalog and the Report are available in hard copy. The CEDaR Catalog - 1974 can be found on microfiche in the ERIC collection: ED 091 383.

TYPICAL USER: Users of the Catalog and the Report include a variety of educational personnel: administrators at all educational levels, teachers, educational researchers, and curriculum designers and developers.

POTENTIAL USE WITHIN TRAIDEX: The Catalog and D & R Report may be used as tools for locating programs of interest underway at CEDaR-member institutions. After the user locates programs of interest, either direct communication with the organization** engaged in the program, or use

* Southwest Regional Laboratory was not a CEDaR member at the time the catalog was published.

** Many of the Centers and Laboratories maintain mailing lists for the newsletters and other vehicles of information dissemination which they publish.

of the secondary sources* mentioned above will keep the TRAIDEX user abreast of the program's activities, services, and products. The institution index of ERIC's Research in Education provides another tool for retrieving information about a program's progress.

COST DATA: D & R Report is a free publication available to all who enter their name on a mailing list maintained by:

CEDaR
Suite 206
1518 K Street, N.W.
Washington, D. C. 20005

The Catalog is available through either the

Commercial Educational Distributing Service
P. O. Box 3711
Portland, Oregon 97208
(Cost: $14.50)

or through the ERIC Reproduction Service - MF $.75, HC $19.80 ED 091 383

EVALUATION: Although many of the activities of CEDaR's members would not be of interest to those involved in military training programs because the activities are keyed to civilian educational institutions or inappropriate grade levels or subject matter, there are other Center and Laboratory activities whose products and research results would be valuable. Relevant programs cover a variety of subject areas: individualized instructional systems, program evaluation, training of educational research and development personnel, educational applications of computer technology, games and simulation, learning research, instructional design, instructional materials development, and so forth.

SOURCE OF INFORMATION: Joseph Schneider, Dir.
CEDaR, Suite 206
1518 K Street, N.W.
Washington, D. C. 20005

CEDaR Catalog
Commercial Educational Distributing Service, 1974

* Since the Catalog will not be reissued, it will soon become outdated. Its function of product announcement will be taken up, in part, by a NIE catalog to be published this summer (see Catalog of National Institute of Education Products).

CURRICULUM MATERIALS CLEARINGHOUSE (CMC)

LOCATION: Xerox University Microfilms
300 North Zeeb Road
Ann Arbor, Michigan 48106
(313) 761-4700

DESCRIPTION: The Curriculum Materials Clearinghouse is designed to provide a link between those who search for and those who have developed curriculum materials. It serves two functions:

- to provide publishing facilities for curriculum developers; and,
- to furnish the educational community with curriculum materials that are both practical and innovative in methodology.

In this capacity, the CMC gathers, screens, and disseminates original curriculum materials from all areas of the educational community.

The first product resulting from these activities is a 52,000-page collection of materials indexed by the publication Curriculum Briefs, Vol. I. The 260 instructional units contained in the collection are available as a set called the Curriculum Materials Microfile, or as separate units.

Beginning mid-1975, CMC plans to release quarterly supplements to the first file. Each supplement will be paralleled by the release of a corresponding index volume.

ENTRY INFORMATION: The first Microfile contains a wide variety of content areas designed for academic levels ranging from preschool through twelfth grade. Future supplements will expand the range of grade level coverage to include post-secondary materials. Curriculum Briefs provides subject, author, and title entry into the Microfile, and abstracts and critical annotations of the instructional units. Notes covering evaluation/validation data plus special requirements and considerations in using the materials are also included in the Briefs.

CRITERIA FOR INCLUSION: CMC solicits curriculum materials that have been developed by individuals or institutions under public and private auspices. The applied rather than the theoretical value of the materials is considered. Quality guidelines for the materials submitted have been established, and only those products conforming to these guidelines will be reviewed. Materials are reviewed by CMC staff, curriculum consultants, and teachers. Materials accepted for inclusion by the review board enter the file unedited.

SIZE: The file presently contains 260 units.

GROWTH: Expected growth is 1000 units per year.

UPDATING: CMC plans quarterly updates of 250 instructional units.

TECHNICAL INFORMATION: Curriculum Briefs is presently available only in hardcopy. Instructional materials are available both in hardcopy and on microfiche.

TYPICAL USERS: Educational practitioners will make use of specific instructional units or groups of related units. Microfiles will be purchased by institutions

with a range of appropriate grade levels and course pursuits.

POTENTIAL USE WITH TRAIDEX: The Microfile Index can be searched for relevant file holdings by those involved in the development of a training program. If applicable units are found, these can be ordered from the CMC for more critical inspection.

COST: The first microfile costs $495.00. Separate units from the file cost $1.00/fiche. Costs per unit for hardcopy are greater. Curriculum Briefs, Vol. I is included with the microfile; as a separate purchase, it costs $50.00.

EVALUATION: Curriculum materials which have not been disseminated through conventional publishing channels exist in abundance. ERIC has collected some of them in its files and is now encouraging authors and authoring institutions to submit their products. The CMC, though, promises to become the repository for the best of these materials.

The first Microfile contains few units relevant to military training. Those that are of interest are in areas of basic education, such as algebra and trigonometry. The supplements to begin in 1975 will include post-secondary materials. Furthermore, vocational-occupational materials will become more strongly represented in the file contents. Both these developments will greatly enhance the value of CMC's file for military training program development.

SOURCE OF INFORMATION: Conversation with Wilfred M. Curtis
Program Manager
CMC

EDUCATION INDEX

PUBLISHER: H.W. WILSON Co.
950 University Ave.
Bronx, N.Y. 10452

DESCRIPTION: Education Index is a cumulative author-subject index to education material in the English language. Although primarily a periodical index, proceedings, yearbooks, bulletins, monographs, and U.S. government materials are also listed. Its subject coverage includes, among other things, secondary and post-secondary education, curriculum and curriculum materials, educational administration, educational psychology, educational research, guidance and counseling, and teacher training. The Index is published monthly except July and August, and cumulated quarterly and annually. Cited articles are from some 250 publications and typically appear in the Index three months after their journal publication.

ENTRY INFORMATION: Only bibliographic data is presented with each citation. Subject entries are arranged alphabetically with subheadings.

CRITERIA FOR ENTRY: The Index scans all major education-related journals for its citations. It indexes U.S. Office of Education Bulletins and Circulars, Vocational Division bulletins, and several other categories of government publications. Selected proceedings and yearbooks are also included

TECHNICAL INFORMATION: The Index is available in hardcopy only. Its publication began in 1929.

TYPICAL USER: The Index is a commonly used retrieval tool of educational practitioners and researchers.

POTENTIAL USE WITHIN TRAIDEX: The Index can be used as a retrieval tool for training related periodical literature.

EVALUATION: In terms of comprehensiveness of coverage of educational literature, the tools of ERIC, namely RIE and CIJE, far exceed the Index. Also, no annotations are provided with Index citations while RIE abstracts its entries and CIJE annotates many of its entries. Yet, the Index does scan the major education periodicals. Furthermore, the subject indexing often allows more convenient entrance into the literature of interest than is provided by the ERIC Thesaurus. Another convenient and useful feature of the Index is the inclusion (since 1970) of citations to book reviews.

SOURCE OF INFORMATION: Review of Index

EDUCATIONAL ADMINISTRATION ABSTRACTS

PUBLISHER: The University Council for Educational Administration in cooperation with the Ontario Institute for Studies in Education

University Council for Educational Administration
29 West Woodruff Avenue
Columbus, Ohio 43210

Ontario Institute for Studies in Education
252 Bloor Street West
Toronto, Ontario, Canada
M5SIV6

DESCRIPTION: This abstracting service is designed to make available to the reader a comprehensive overview of recent research and new knowledge in the field of educational administration. Some fifty abstractors associated with institutions of higher education and educational research write and sign the abstracts.

ENTRY INFORMATION: Included with each entry is bibliographic data about the article and an abstract which usually summarizes the article's contents and conclusions. The articles chosen are of interest to administrative practitioners and scholars in elementary, secondary and higher education. Articles are grouped into subject area classifications which remain relatively constant with each issue. In the Fall, 1974 issue, the general categories of subject areas included administrative tasks, administrative processes and organizational variables, societal factors influencing education, programs for educational administrators, special education administration, and planning and futurology.

Author and journal indexes are provided. Periodically a more extensive subject index covering accumulated back issues is released.

CRITERIA FOR ENTRY: Some 100 journals are scanned for appropriate articles. These range from administration-oriented publications like the Administrative Science Quarterly and the Harvard Business Review, to peripherally related publications like Daedalus, the Journal of Applied Psychology, and the Review of Educational Research.

SIZE: The Journal has been in publication since 1966. (It was formerly called Educational Abstracts.) It is issued three times a year. Recent issues have averaged 200 citations.

UPDATING PROCEDURE: Usually one abstractor retrieves and abstracts all relevant articles from any one journal surveyed. The majority of the articles cited are from journals published up to a year before the article's Abstract appearance.

TECHNICAL INFORMATION: The journal is available in hardcopy from the publishers, and on microfilm from

University Microfilms
300 North Zeeb Road
Ann Arbor, Michigan 48106

TYPICAL USER: Administrative practitioners and scholars in elementary, secondary, and higher education.

POTENTIAL USE WITHIN TRAIDEX: Personnel concerned with determining the goals of military training programs and with managing training program design and development projects may find the publication useful in keeping abreast of management-related developments.

COST: The serial may be ordered from
The University Council for Educational Administration
The Ohio State University
29 West Woodruff Avenue
Columbus, Ohio 43210
for $10.00 per year (3 issues).

EVALUATION: Abstracts are collected for a broad spectrum of public and private school administrators and administrative scholars. Hence, many of the subject areas are of marginal or no interest to those in military training management and not all of the articles cited within relevant subject areas are of interest. The Abstracts are usually concise and informative; for many purposes, retrieval of the original articles is unnecessary as many of the abstracts fully describe the article and its conclusions.

SOURCE OF INFORMATION: Review of the Spring and Fall issues, 1974.

EDUCATIONAL MEDIA YEARBOOK-1974

AUTHOR/COMPILER: James W. Brown (ED.)

PUBLISHER: R. R. Bowker Company

DESCRIPTION: This is the second edition of an annual compendium of information and current ideas relating to educational media. The purpose of the Yearbook is to help individuals associated with media and communications to see more clearly how their work relates to professionals of allied fields and to facilitate useful inter-communications among them.

The Yearbook is divided into two parts. The first part contains a series of 37 short, state-of-the-art papers (151 pages). The second provides media-related reference and directory information (350 pages).

ENTRY INFORMATION: The state-of-the-art papers are divided into 6 areas: the work of major media-related organizations (6 papers), educational media developments (12 papers), recent developments of concern to the media profession (4 papers), recent research activities (5 papers), opinion and economic data on the financial side of educational media and technology (4 papers), and media developments outside of the United States (6 papers).

A variety of information resources are provided in the reference and directory section. The following three are of most interest to TRAIDEX users:

(1) An alphabetical listing of more than 500 media-related organizations. Included with each citation is the organization's address, telephone number, chief contact person (not with all entries), and a description (not with all entries).

(2) An alphabetical listing of more than 450 media-related periodicals. Included with each citation is the publisher's name and address, the number of issues per year, the yearly subscription cost, and a brief description. The periodicals are indexed by broad subject areas (25 categories).

(3) A list of some 1500 print and non-print resources, arranged alphabetically by title, useful as tools in instructional design and development, and as resources in pre-service and in-service instruction of educational personnel working with media. Given with each citation is the resource's author, publisher, cost, date of publication, ERIC accession number (where relevant), and a description. The resources are indexed by broad subject areas (25 categories) and authors. An address list is given of publishers, producers, and distributors.

Each state-of-the-art paper and information directory is written or compiled by a subject matter specialist. Introductions to the information directories are provided by the compilers.

CRITERIA FOR INCLUSION: Organizations selected for citation included those appearing in the 1973 Yearbook and those whose published purposes or inclusion in other listings suggested their appropriateness for use in this listing.

The titles chosen for the Periodicals Directory represent principal categories of the educational media field, including a few that are not usually associated with it but that are pertinent. Several publications and a number of periodical collections were consulted in preparing the directory, including:

(1) Ulrich's International Periodicals Directory, 15th ed
R.R. Bowker Company, 1973,

(2) Bill Katz's Magazines for Libraries, 2nd ed
R.R. Bowker Company, 1972,

(3) The Standard Periodical Directory, 3rd ed
Oxbridge Publishing Company, 1970,

(4) The Multi-Media Reviews Index
Pieran Press, 1972,

(5) Margaret Chisholm's Media Indexes and Review Sources
University of Maryland Library Service, 1972,

(6) The Aspen Notebook on Government and the Media
William L. Rivers and Micheal J. Nyhan (Eds.)
Praeger, 1973,

and (7) the periodical collections of
the ERIC Clearinghouse on Information Resources,
the Association for Educational Communications and Technology,
San Jose State University Library,
and Stanford University Library.

Also, serial publications of the organizations cited in the Organizations Directory of the Yearbook are included, as well as relevant periodicals mentioned on recent news columns of several media-related periodicals.

The media chosen for listing in the Resources Directory had to be produced and published since 1963 and still available for rent, sale, or loan as of January, 1974. The listing is not comprehensive but is intended to eliminate preliminary searching for materials.

GROWTH: Media-Related Periodicals is a new addition to the Yearbook. The Resources Directory experienced a net growth of about 100 entries. There were some 350 titles added while some 250 were deleted because they were out of print or out dated.

UPDATING PROCEDURE: Directory entries carried over from the 1973 edition of the Yearbook were updated. Questionnaires were sent to all cited organizations to obtain the information provided in the Yearbook. Features added to the new edition were entered because of their relevance to the educational media field.

The Yearbook will continue annual publication and promises to maintain a flexible policy concerning what information it will survey.

TECHNICAL INFORMATION: The Yearbook is available in hardcopy.

TYPICAL USER: The Yearbook is intended for use by educational technologists, librarians, information scientists, and personnel in telecommunications as a survey of the state of educational media. It can be used as a source of ideas and resources required in designing training and education programs, in writing media-related funding proposals, in teaching media courses, and/or in ordering media-related materials.

POTENTIAL USE WITHIN TRAIDEX: TRAIDEX users desiring a survey of current educational media developments may find many relevant papers in the first section of the Yearbook. Those interested in the activities of organizations or the services which they may provide can turn to the appropriate directory. Unfortunately, no index is given with the Organizations Directory. Hence, for those seeking organizations with specific characteristics, a manual search of the citations is necessary. Hopefully, this lack of a convenient indexing scheme will be corrected in later editions. The Periodicals Directory, although broadly indexed, may be used more conveniently in locating periodicals with specific attributes. TRAIDEX users may use the Resources Directory not only to locate student-oriented materials, but also to find teacher-, curriculum developer-, and curriculum designer-resources.

EVALUATION: The Yearbook is a comprehensive source of current, media-related information. Its major deficiency is the brevity of descriptions found for the majority of Directory citations. Few provide the information needed to determine whether the cited item is what the user seeks, and no evaluative information is provided for either periodical or resource entries. The Yearbook's continued publication and expansion may correct this deficiency.

SOURCE OF INFORMATION: Inspection of the Yearbook.

EDUCATIONAL PRODUCTS INFORMATION EXCHANGE (EPIE) INSTITUTE

DIRECTOR: P. Kenneth Komoski

LOCATION: EPIE Institute
463 West St.
New York, N.Y. 10014
(212) 675-1163

DESCRIPTION: EPIE is a nonprofit organization involved primarily in assessments of educational software and hardware products. Its purpose is to provide readers of its publications with information and counsel, based on impartial, independent studies of availability, use, and effectiveness of educational materials, equipment, and systems. EPIE's support is primarily from two sources: consumers of EPIE products and research and development grants.

A recent Ford Foundation grant has established at the Institute a laboratory for the comparative testing of educational hardware. From the laboratory, evaluations of how well a product fulfills the claims of its producer, how well it performs in actual school practice, and how competing products compare with one another are made. Feedback from product users, reports by consultants engaged by EPIE, and evaluations performed by other agencies provide other sources for evaluative data about hardware; these channels are also used to collect evaluative data about software products.

EPIE products include a bimonthly report series, Educational Product Report, and two biweekly newsletters, EPIEgram and Performance.

ENTRY INFORMATION: Educational Product Report presents descriptive and evaluative indepth reviews of selected major developments and systems. Each issue is devoted to a central topic. The orientation is toward those involved in developing or purchasing educational systems or products used primarily in elementary and secondary education. The Reports were once issued more frequently with a mixture of both indepth and inbrief issues. EPIE will no longer issue inbrief reports but will concentrate its activities on indepth studies.

EPIEgram alerts its readers to the findings detailed in EPIE Reports and draws conclusions based on the information presented. It discusses trends in education, acts as a vehicle of information exchange between EPIE readers, reports on EPIE activities, makes suggestions about product use, and gives news about and evaluations of educational products. In each issue, brief reports are presented over a wide spectrum of interests.

The format of Performance is similar to that of EPIEgram, but Performance is written for another audience. Whereas EPIEgram is written for educational product consumers within elementary and secondary education, Performance is written for product consumers working in industrial training. It reports laboratory and field evaluations of training media and equipment, and offers purchasing advice. It is hardware oriented and only occasionally reports software product information.

CRITERIA FOR ENTRY: The choice of topics in EPIE publications is highly dependent on the feedback of interests and problems of EPIE readers and the product trends within the education and training community. When engaging in product comparisons and evaluations, EPIE Reports attempt to comprehensively survey the commercial market.

SIZE: EPIE Reports have been issued since 1967 (formerly EPIE Forum); EPIEgram began publication in 1972 and Performance in 1974.

UPDATING PROCEDURES: Product reviews are updated by supplementary reports according to reader demand.

TECHNICAL INFORMATION: EPIE products are available in hardcopy only.

TYPICAL USERS: Education or training practitioners working with or selecting educational products.

POTENTIAL USE WITHIN TRAIDEX: Performance can be used as an aid in the selection and use of hardware products. It can be used to alert TRAIDEX users of relevant surveys in EPIE Reports and the results of relevant surveys. EPIE Reports reviewing hardware developments provide extensive and useful information to those selecting hardware for military training programs.

COST: Performance costs $75.00/year (22 issues). EPIE Reports and EPIEgram may be purchased for $50.00/year. Separately, EPIEgram is $24.00/year (18 issues) and the EPIE Reports are $20.00/report.

EVALUATION: Since EPIEgram and EPIE Reports are directed to the elementary and secondary civilian educational community, most of the Reports devoted to software review, and many of the topics discussed in EPIEgram are of marginal or no interest to TRAIDEX uses. Because Performance is written for those in industrial training, its reporting is more attuned to the concerns and needs of those in military training. The hardware product reviews reported in Performance provide useful and concise information.

SOURCE OF INFORMATION: Review of EPIE products and conversation with Brian Boucher, Editor of Performance and Manager of Equipment Evaluation, EPIE Institute.

EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

LOCATION: U.S. National Institute of Education
19th and M Streets
Washington, D.C. 20208

DESCRIPTION: ERIC is an information service designed and developed about 1965 by the U.S. Office of Education and now operated by the National Institute of Education. ERIC monitors, acquires, evaluates, abstracts, indexes, and lists in reference publications current significant information relevant to education. Non-copyrighted materials processed by ERIC are available at a nominal price through the ERIC document and reproduction service in either hardcopy or microfiche format.

The major continuing announcement publications prepared by ERIC are the Current Index to Journals in Education (CIJE) and Research in Education* (RIE). Both are monthly publications, with semiannual and annual cumulative indexes available. Both are available in either hard-copy or on machine-readable magnetic tape.

Sixteen clearinghouses located throughout the nation collect and abstract the documents entered into CIJE and RIE. Each center is located in a facility, such as a university or professional society, that is naturally strong in a particular area of education. Document processing within a given clearinghouse is restricted to those items related to the clearinghouse's subject specialty.

In addition to document processing, the centers are actively involved in analyzing information related to their subject specialty. This activity results in a variety of serial and non-serial clearinghouse publications: newsletters, bulletins, directories, monographs, interpretive summaries, research reviews, state-of-the-art surveys, and bibliographies. These products are announced in CIJE and RIE, and also in separate compilations**.

Mailing lists of those interested in receiving announcement's of a clearinghouse's services, publications, and activities are maintained at each center. ERIC has not been encouraged to handle personal information requests other than to provide literature citations relevant to the inquiry, but some of the clearinghouses do provide more extensive assistance.

Of the 16 clearhouses, the following twelve are relevant to the TRAIDEX user:

Career Education
204 Gabel Hall
Northern Illinois University
Dekalb, Illinois 60115
Subject coverage: All aspects of adult and continuing, career, and vocational-technical education.

* In January, 1975 the name of this document was changed to Resources in Education.

** ERIC Information Analysis Products 1967-1972 is an example of such a compilation. Published in 1973 by Macmillan Information, it is a five year cumulation of citations and abstracts of publications reflecting the information analysis activities of the clearinghouses.

Handicapped and Gifted Children
Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091

Counseling and Personnel Services
University of Michigan
School of Education Building, Room 2108
East University and South University Sts.
Ann Arbor, Michigan 48104
Subject coverage: Personnel work at all levels and in all settings of education; use and results of personnel procedures, such as testing and interviewing, as well as disseminating and analyzing such information; preparation, practive, and supervision of personnel workers; the nature of pupil, student, and adult characteristics.

Educational Management
University of Oregon
Eugene, Oregon 97403
Subject coverage: School management at the elementary and secondary level and educational facilities at all levels.

Higher Education
George Washington University
One Dupont Circle, N.W., Suite 630
Washington, D.C. 20036
Subject coverage: Various aspects of higher education. Excluded areas are: teacher education, junior and community colleges, counseling and personnel services.

Information Resources
Stanford Center for Research and Development in Teaching
Stanford, California 94305
Subject coverage: Instructional media and technology; libraries and information service; educational techniques that are an outgrowth of technology, such as systems analysis.

Junior Colleges
University of California at Los Angeles
Powell Library, Room 96
405 Hilgard Ave.
Los Angeles, California 90024
Subject coverage: Various aspects of public and private community junior colleges.

Languages and Linguistics
Center for Applied Linguistics
1611 North Kent Street
Arlington, Virginia 22209
Subject coverage: Aspects of the teaching and learning of languages and linguistics. Also covered is English as a foreign language.

Reading and Communication Skills
National Council of Teachers of English
1111 Kenyon Road
Urbana, Illinois 61801
Subject coverage: Areas of reading, English, communication skills, writing, speaking, and listening; mass communication and interpersonal and small group interaction.

Early Childhood Education
University of Illinois
805 West Pennsylvania Avenue
Urbana, Illinois 61801

Rural Education and Small Schools
New Mexico State University
Box 3AP
Las Cruces, New Mexico 88003

Science, Mathematics, and Environmental Education
Ohio State University
1200 Chambers Road
Columbus, Ohio 43210
Subject coverage: All levels of science and mathematics education; adult and continuing education in science and mathematics; materials and programs related to environmental education.

Social Studies/Social Science Education
Social Science Education Consortium, Inc.
855 Broadway
Boulder, Colorado 80302
Subject coverage: All areas of social studies and social science education; the teaching and learning of art and music.

Teacher Education
American Association of Colleges for Teacher Education
One Dupont Circle, N.W., Suite 616
Washington, D.C. 20036
Subject coverage: Pre-service and in-service preparation of teachers, supporting school personnel, and teacher educators.

Tests, Measurement, and Evaluation
Educational Testing Service
Princeton, New Jersey 08540
Subject coverage: Test and other measurement devices; evaluation procedures and techniques; application of tests, measurement, or evaluation in educational projects or programs; research design and methodology.

ENTRY INFORMATION: Research in Education: The documents abstracted in RIE cover all fields of education. Indexed by subject, author, and institution, RIE abstracts reports of innovative programs, conference proceedings, bibliographies, catalogs, directories, outstanding professional papers, curriculum-related materials, and most significant reports of efforts in educational research and development. The majority of abstracted documents are available through the reproduction service.

In the main entry section of RIE, documents are arranged numerically according to a central-ERIC accession number. Given with the citation are the author, title, sponsoring agency, publication date, reproduction availability and cost, pagination, availability outside of the ERIC system, informative abstract, and other information, such as subject descriptors.

Current Index to Journals in Education: CIJE is a guide to educational and education-related publications. Copies of documents indexed by CIJE are not available through the reproduction service because of copyright problems.

The main entry section of CIJE arranges documents numerically according to a central-ERIC accession number. Given with the citation are the article title, author, journal title, volume and issue number, pagination, publication date, annotation (not given with all entries), and other information, such as a list of subject descriptors.

CIJE indexes by author, subject, and journal contents. The journal contents index lists journals in alphabetical order, giving the date of the journal and the title of the article indexed.

The headings in the subject indexes of both CIJE and RIE are taken from a list periodically published as the Thesaurus of ERIC Descriptors.

CRITERIA FOR INCLUSION: In CIJE, coverage of journal literature is intended to be comprehensive, rather than selective, and therefore articles are included from peripheral journals not usually associated with the field of education.

ERIC tries to insure comprehensive, systematic acquisition of reports for listing in RIE from sources in the United States and selected foreign countries. This objective in fulfilled by clearinghouse attempts to canvass their subject areas regularly in search of unpublished reports or documents. Reports of dubious interest or marginal quality are discarded during the document processing phase of the operation

SIZE: As of the December, 1974 issues of RIE and CIJE, more than 85,000 documents have been abstracted in RIE and more than 100,000 annotated in CIJE.

GROWTH: Presently more than 1000 entries are being made monthly in RIE and more than 1500 in CIJE.

UPDATING PROCEDURES: Approximately 30,000 reports per year are received for scanning or selection for inclusion in RIE. These come from both solicited and unsolicited sources. CIJE currently covers more than 700 major educational and education-related publications.

TECHNICAL INFORMATION:

Storage media: Hardcopy, microfiche, magnetic tape

Tape specifications: ERIC tapes come in two formats, ERIC and MARC II. ERIC-format tapes are 9-track, IBM 360 variable length records, either 800 or 1600 BPI. Normally, the tapes are unlabeled, but labels can be written at additional cost. ERIC format tapes are coded in EBCDIC. MARC II tapes are 9-track, 800 or 1600 BPI, variable length unblocked, with a maximum block size of 2048 bytes. The tapes carry the standard MARC II header and trailer labels, and are coded in ASCII.

For both formats, complete Master Files are suppled on 2400-foot tape only, but updates may be supplied on 600-foot or 1200-foot reels, as appropriate.

Documentation: Full documentation of tape format and content is available, along with other data necessary for tape use.

Software used: Only the tape files are supplied, not the software for the manipulation and searching of the ERIC data base. There are a number of sources for such software. Software packages which have made use of the ERIC Data Base include: DIALOG, ORBIT, QUERY, MYRIAD, TEXTPAC, STAIRS, STRC-IVS, and many others.

TYPICAL USER: Users of ERIC include school administrators, teachers, researchers, information specialists, professional organizations, and graduate and undergraduate students. Entire ERIC microfiche collections are maintained by many university and college libraries, schools and supplementary educational centers, State educational agencies, Office of Education Regional Offices, ERIC Clearinghouses, Regional Educational Laboratories, and other education-related institutions. A list of collections is provided in the

Directory of Educational Information Resources
Macmillan Information
866 Third Avenue
New York, N. Y. 10022

Typically a search of the ERIC data base is made manually by use of the hardcopy RIE and CIJE publications. Computerized searches can be done, though, and many organizations provide such searches as a regular service. Sites providing searches, irrespective of whether the service is available only to a circumscribed community or to all users without restriction, are listed in the

Survey of ERIC Data Base Search Services
Jonathon D. Embry, Wesley T. Brandhorst, and Harvey Marron
National Institute of Education
Washington, D.C. 20208

POTENTIAL USE WITHIN TRAIDEX: The Eric files represent virtually complete coverage of current significant developments in education. The report literature is covered by RIE from 1966; the journal literature by CIJE from January 1969. Through the ERIC system, the TRAIDEX user can retrieve the population of relevant, current documents on almost any education-related topic.

Utilization of the information services and products of ERIC clearinghouses can keep the TRAIDEX user abreast of educational developments within the subject coverage of the clearinghouses.

COST DATA: Current prices for all of ERIC's major products can be found in the back pages of recent issues of RIE.

EVALUATION: ERIC is the most comprehensive source of information about the literature of education. Many valuable documents that would not be readily available otherwise are made easily accessible through the ERIC system, including such things as reports of federally sponsored research studies, reports of conference proceedings, and technical papers.

In its attempt to be comprehensive, ERIC includes a broad variety of documents in its files. For example, research reports range from studies based on large financial and manpower commitments to studies performed on a classroom sample by a practicing teacher. Because of the range of documents available, searching of the file can be tedious unless the searcher can concisely define what he is looking for.

Even when precise definition of items to be retrieved is formulated, it is sometimes difficult through use of the ERIC Thesaurus to determine all the relevant subject entries to use of retrieval.

Furthermore, when a group of related terms is given in the Thesaurus, which of the group is most appropriate is not always made clear by Thesaurus annotations.

SOURCES OF FURTHER INFORMAION: ERICTAPES/ERICTOOLS
Leasco Systems & Research Corporation
4833 Rugby Avenue, Suite 303
Bethesda, Maryland 20014

How to Use ERIC
National Institute of Education
Available through U.S. G.P.O.

Computer-based Reference Service
M. Lorraine Mathies and Peter G. Watson
ALA 1973

EDUCATIONAL TESTING SERVICE TEST COLLECTION (ETSTC)

PUBLISHER/COMPILER: Educational Testing Service, Princeton, N.J.

DESCRIPTION: The Educational Testing Service Test Collection is an extensive library of tests and other measurement devices. It was established to serve as an archives for testing and to provide current information on available tests and related services to persons engaged in research, advisory services, education, and related activities. In addition to tests, files on American and foreign test publishers, scoring services and systems, state testing programs, published test reviews, and reference materials on measurement and evaluation are maintained.

Qualified persons, whether affiliated with Educational Testing Service or not, may have on-site access to the materials in the Test Collection. Publishers' restrictions regarding access to test materials are carefully observed. Persons unable to visit the Collection may direct specific questions to its staff by mail or telephone.

RESOURCES/SERVICES: Notification of recent acquisitions to the Test Collection, and announcements of new tests and services are provided in the Test Collection Bulletin. This quarterly digest of information on tests is available on a subscription basis. New publishers, new references on measurement and evaluation, a calendar of testing programs, references to test reviews, and notification of publisher changes are also included in the Bulletin. Each test entry in the Test Collection Bulletin contains the following information: title, author, copyright date, age group or grade level, publisher or author, and description.

Another regular publication of the ETS Test Collection is the Major U.S. Publishers of Standardized Tests, a pamphlet listing publisher addresses. In addition, annotated test bibliographies are occasionally prepared and are available on request.

Although the Bulletins include most tests held by the Center, no published list of all holdings is available. The Center will, however, conduct special searches of its files on request, and will respond to telephone or mail inquiries.

The Test Collection Center does not evaluate any of the tests in its collection. Any evaluations noted by the publisher are included in the file.

CRITERIA FOR INCLUSION: All tests obtained by the Center are included in its files. Most, but not all, tests are included in the Bulletin.

SIZE: The Test Collection contains approximately 10,000 instruments.

GROWTH: Approximately 800 tests are currently being added per year, exclusive of a special Head Start Collection.

UPDATING PROCEDURES: Most of the tests are obtained through examination of publishers' catalogs and documents and journals. Unsolicited submissions from authors are also received and filed by the Center. Staff members do the abstracting and subject indexing. Tests are not deleted from the files; if a test goes out of print it is noted in the test description.

TECHNICAL INFORMATION: The Test Collection files are not computerized. The Center plans to eventually computerize its catalogs.

TYPICAL USER: The Center is typically used by teachers, researchers, and those involved in vocational guidance.

POTENTIAL USE WITHIN TRAIDEX: The Center could be used to locate achievement tests, performance tests and measures, student entry measures (such as attitude or interest surveys, aptitude or placement tests, etc.), program evaluation measures, and other types of tests.

COST DATA: Subscription to the Bulletin costs $2 per year (foreign subscriptions $2.50). Inquiries are answered free of charge.

EVALUATION: The Test Collection Center is the largest and most complete library of test instruments in the United States, and provides the most comprehensive source of information on available tests. The test files are heavily weighted toward non-performance tests, though a greater shift toward performance tests is expected. While computer support for searching is not available, the Center does provide a useful manual search service, as well as publishing occasional special bibliographies. The annotations in the Bulletin are useful, though non-evaluative.

SOURCE OF INFORMATION ABOUT DATA BASE: Test Collection Center, Educational Test Service, Princeton, N.J. 08540 (609 921-9000).

ENCYCLOPEDIA OF EDUCATIONAL EVALUATION

PUBLISHER: Jossey-Bass

AUTHORS: Scarvia B. Anderson, Samuel Ball, Richard T. Murphy, and Associates
Educational Testing Service, Telephone: (609) 921-9000

DESCRIPTION: This 1975 publication is a product of research sponsored by the Office of Naval Research. It contains a series of brief articles about the main concepts and techniques of the field of education and training program evaluation. Entries in the ENCYCLOPEDIA are arranged alphabetically. Besides using the alphabetic listing, the reader may also enter the ENCYCLOPEDIA through name and subject indexes, and through a classification scheme which places each article into one of the following major concept areas: evaluation models, functions and targets of evaluation, program objectives and standards, social context of evaluation, planning and design, systems technologies, variables, measurement approaches and types, technical measurement considerations, reactive concerns, and analysis and interpretation.

ENTRY INFORMATION: The terms and phrases discussed in the ENCYCLOPEDIA are those found in the literature of program evaluation. The authors tried to capture in their listing technical terms with meanings not readily known, such as "ipsative measures", and those terms commonly used whose significance to the field of evaluation are not readily understood, such as "attitudes". In each article, the authors define the term or phrase cited and discuss its relevance to the world of evaluation. A short bibliography is given at the end of each article (generally no more than five listings). The citations provide extensions of the article and/or illustrative examples of the concept. If a reference source is a book, a brief annotation is given with it.

CRITERIA FOR INCLUSION: The present listing was derived from discussions between the authors and feedback from an advisory committee associated with the ENCYCLOPEDIA. Furthermore, as the product was developed, the necessity for entering concepts used in the process of defining others added entries to the listing.

The bibliographic citations were limited to published and accessible sources.

SIZE: The ENCYCLOPEDIA has 141 entries.

UPDATING: If the ENCYCLOPEDIA is well received, updating may occur. Presently, no plans for updating exist.

TECHNICAL INFORMATION: The ENCYCLOPEDIA is available in hard-copy.

TYPICAL USER: The ENCYCLOPEDIA was written for those who must interpret program evaluations or who must call for an evaluation to be done. Program evaluators will find the book to be a useful reference source, as will students studying program evaluation.

POTENTIAL USE WITHIN TRAIDEX: The ENCYCLOPEDIA can be used by TRAIDEX users who must interpret training program evaluations. Also, those involved in evaluating a program can use the ENCYCLOPEDIA as a reference book.

COST DATA: $17.50

EVALUATION: The ENCYCLOPEDIA provides a convenient source of information about concepts and techniques associated with the area of program evaluation. Comprehensive bibliographic citations were, by intent, not included with the articles.

SOURCE OF INFORMATION: Preface to the ENCYCLOPEDIA and discussion with Samuel Ball, Educational Testing Service, Princeton, New Jersey 08540 (609 921-9000).

ENCYCLOPEDIA OF EDUCATIONAL RESEARCH (FOURTH EDITION)

EDITOR: Robert L. Ebel

PUBLISHER: The Macmillan Company

DESCRIPTION: The Encyclopedia was first published in 1941 and has been published in each 10-year period thereafter*. It is presently in its fourth edition. The Encyclopedia is designed to provide a convenient source of information about most of the important aspects of education. It covers various areas of specialization at all levels of education.

ENTRY INFORMATION: The fourth edition contains articles categorized into twenty content areas. These content areas include developmental psychology, psychology of learning, human behavior, curriculum, instruction, educational measurement, research, vocational subjects, and student personnel. The articles provide a concise summary of the research on the topics under review. Many references are cited for further information. Along with elegantly designed and analyzed experimental studies, the list of references is likely to include documents presenting analyses of educational problems, critiques of educational practices, and reports of practical experiences. Articles are arranged in alphabetical order according to title; the Encyclopedia is also indexed by subject.

CRITERIA FOR INCLUSION: A broadly conceived notion of research was used to determine the topics to be reviewed in the Encyclopedia. All kinds of contributions to educational knowledge were considered, not simply those resulting from experimental study.

SIZE: 164 articles are included in the 4th-edition.

UPDATING PROCEDURES: Each edition revises the preceding edition. In the fourth edition, topics dealing with new areas of research interest and activity were included, while related topics entered separately in the third edition were combined into more comprehensive articles, and those topics waning in interest and activity were deleted. Contributors to the Encyclopedia are recognized authorities in their area of review.

TECHNICAL INFORMATION: The Encyclopedia is available in hardcopy only.

TYPICAL USER: Scholars, students, and practitioners of education at all educational levels and in most fields of specialization.

POTENTIAL USE WITHIN TRAIDEX: The Encyclopedia can be used to provide a review of relevant research (as of about 1967) on many aspects of education.

COST: $38.95

* Publication dates are as follows: 1941, 1950, 1960, and 1969

EVALUATION: The Encyclopiedia provides a convenient way to retrieve thorough and well-researched reviews of educational research. Because it is so seldom reissued, updating of its articles may be desired. A tool which shares the convenience of use of the Encyclopedia and frequently updates its articles is the Review of Educational Research. This quarterly periodical publishes unsolicited reviews of research on topics of the contributors choosing. The Review is indexed in both the Education Index and ERIC's Current Index to Journals in Education.

SOURCE OF INFORMATION: Review of the Encyclopedia

A GUIDE TO THE EVALUATION OF EDUCATIONAL EXPERIENCES IN THE ARMED SERVICES

PUBLISHER: American Council on Education, Washington, D.C.

AUTHOR/COMPILER: Office on Educational Credit, American Council on Education

DESCRIPTION: The GUIDE contains descriptive and evaluative information about formal courses conducted by the various branches of the Armed Services. In addition to describing each course, it provides credit recommendations intended to assist college and university officials in determining whether or not, and how much, academic credit should be awarded to a student for courses taken in the military. These credit recommendations are prepared by teams of civilian educators who are experts in the academic areas involved.

The GUIDE has been published irregularly: the first edition was issued in 1946, with succeeding editions published in 1954, 1968, and 1974. The Office on Educational Credit (OEC) now intends to publish a revised version every year. The GUIDE is presently available in printed form, and is distributed free to most colleges and universities in the United States.

OEC also provides credit information by phone or mail, and will honor a request to evaluate a course meeting its criteria but not included in the GUIDE.

The information listed in the 1974 GUIDE, together with certain identifying information on each course, is on a computer tape used for photo-composition of the GUIDE. While no software presently exists for searching this tape, OEC plans to maintain the tape in order to produce subsequent versions of the GUIDE and for eventual use in a retrieval system.

ENTRY INFORMATION: The GUIDE contains entries on all formal resident service school programs for which syllabi are available. It covers all training areas, and includes courses taught by the Air Force, Army, Coast Guard, Marine Corps, Navy, and the Department of Defense. Credit recommendations are provided for the vocational-certificate level, the technical-associate level, the upper division baccalaureate level, and the graduate level, as appropriate.

The GUIDE tape contains the following information on each course: identifying number, agency, agency course number, keywords, subject categories, military occupational specialty, code(s), title, school(s), location(s), start-and end-dates for each administration, length in weeks and contact hours credit recommendation(s), and brief statements of course objectives and instructional content.

OEC plans to expand its activities to include non-military courses taught by other governmental and private agencies. A pilot project is already underway to evaluate courses given by selected state and governmental agencies. This project is being supported by the Fund for the Improvement of Post-Secondary Education and the Carnegie Foundation. For details on the data bases which will be developed through this and other planned projects is not yet available.

CRITERIA FOR INCLUSION: Course entries are limited to formal resident service school training programs. Usually, a course must be given on a full-time basis, be not less than three weeks in duration, and have a minimum of thirty clock hours of academic instruction. If a course is less than three weeks then it will be included if it has a minimum of ninety clock hours of academic instruction. Not included are informal on-the-job training programs, service jobs or billets, training programs conducted by contract with educational institutions and industry, training programs conducted overseas, service extension programs, training conducted prior to Pearl Harbor, foreign service school training, military training conducted primarily for civilians, ROTC training, service academy training, or training programs which carry a security classification.

SIZE: The present GUIDE tape contains approximately 4700 course entries covering approximately 9000 separate course administrations.

GROWTH: It is estimated that approximately 400 new course entries will be added per year.

UPDATING PROCEDURES: Updating of the OEC internal files is done continuously; updating of the tape will be on a weekly or bi-monthly basis. Editing of entries is done by trained OEC staff, using well-defined procedures. The source of all information except identifying codes and the credit recommendation(s) is syllabi provided by the service schools. Approximately 600 changes (including additions) take place per year.

TECHNICAL INFORMATION

Storage medium: Tape

Computer specifications: Prepared by an IBM 360.

Documentation/consultation: Documentation on tape format only.

Software used: No software is available for searching. Software for photocomposition is a product of COMNET Publicate, Inc.

Transportability: The tape is transportable to any machine which can read a 360 tape (9 track, 1600 bpi).

TYPICAL USER: The GUIDE is designed to be used by college registrars and admissions officers in evaluating a student's previous educational experience. It can also be used by the Armed Services in counseling service personnel.

POTENTIAL USE WITHIN TRAIDEX: The GUIDE would most likely be of use in locating courses with similar objectives or instructional content. The user might then be directed to further information on instructional strategies or equipment used in these courses.

COST DATA: All post-secondary educational institutions in the United States receive a free copy of the GUIDE. Copies are also provided free to military education advisors at various installations around the world. Additional copies cost $7 to $8.

EVALUATION: Except for the credit recommendation, most of the data elements listed in the GUIDE are available in greater detail from other sources (e.g., service school catalogs). Its value, therefore, is probably limited to preliminary searching. However, the GUIDE contains several useful indexes, and covers all of the major service training programs. Within the categories of programs covered, the data base is relatively complete and accurate.

SOURCE OF INFORMATION: Office on Educational Credit, American Council on Education, Washington, D.C. 20036

HUMAN RESOURCES RESEARCH ORGANIZATION

LOCATION: 300 North Washington Street
Alexandria, Virginia 22314
Telephone: (703) 549-3611

DESCRIPTION: HumRRO is a research and development organization which attempts to discover, develop, and apply human factors and social science principles and techniques to improve training and operational performance. At the request of the United States Army, it was established in 1951 by George Washington University. In an attempt to achieve a balance between work for the Army and other sponsors, HumRRO terminated its relationship with the University in 1969 and became an independent, nonprofit corporation. Presently it accepts contracts with agencies of federal, state, and local governments, and with private industry.

In the military sector, HumRRO's efforts range from basic research to consulting. Their activities have included training program development in equipment operation and maintenance, leadership, and small group cooperation; and studies of man-machine interactions, human behavior in various military environments, and the variables of the instruction-learning process.

HumRRO maintains seven laboratories. Two are located at headquarters in Alexandria, while five are housed on Army installations around the country (Georgia, Kentucky, Alabama, Texas, and California). Its research staff consists mainly of psychologists, but includes sociologists, anthropologists, linguists, and specialists in military science, computer technology, engineering, and law. HumRRO publications include technical reports, professional papers, and What HumRRO Is Doing, a serial describing ongoing projects. A listing of research and development publications and products is provided in a yearly bibliography. Bibliographies can be obtained from HumRRO headquarters.

ENTRY INFORMATION: HumRRO has produced an extensive library of research and development publications and products. Reports are available from the office of the president of HumRRO (Alexandria, Virginia), ERIC, NTIS, the U.S. Department of Commerce, and/or the Defense Documentation Center.

The 1971 bibliography is an accumulation of information about HumRRO research reporting to that time. Abstracts are provided for most items. Author, sponsor, and key word indexes are included. The document is divided into three parts, the first of which is the list of fiscal year 1971 items. Part II compiles materials that have been published by HumRRO since its inception. Part III is a separate listing of research and development products and experimental materials. Included in this section are such items as documents, manuals, and other materials that may be suitable for adaptation for operational use. Products range from specific training programs and technical manuals to training items for new equipment.

CRITERIA FOR INCLUSION: Only classified items are omitted from listings of HumRRO publications and products.

SIZE: In the 1971 accumulation, approximately 1000 items were cited in section II (235 pages). Part III is a 22 page listing of products, each citation giving only bibliographic information.

GROWTH: The list of fiscal year 1971 items contains approximately 100 citations.

UPDATING PROCEDURES: The bibliography of publications is supplemented or accumulated annually. For example, the 1971 compilation was followed in 1972 by a Bibliography of Publications and Presentations During FY 1972.

TECHNICAL INFORMATION: HumRRO publishings are available in hardcopy. Many can be obtained on microfiche. HumRRO maintains data files in machine-readable form. Two holdings are cited in Sessions' Directory of Data Bases in the Social and Behavioral Sciences. One contains data collected January-June 1971 on Army Subpopulations Including Training, Life, and Career Opportunities. The other contains information collected since 1969 on Demographic and Psychological Data on Trainees Undergoing Helicopter Pilot Training. Access to the files is limited but descriptive documention of their format is available.

TYPICAL USER: Information provided by HumRRO publications is intended for use by research and development personnel concerned with human factors problems, and operational personnel concerned with utilization of training and other research information and products.

POTENTIAL USE WITHIN TRAIDEX: HumRRO publications can be used within TRAIDEX as a source of information about materials and basic research findings directly related to military training.

COST DATA: Requests for information concerning the availability and cost of HumRRO publications will be answered by the

Executive Office
Human Resources Research Organization
300 North Washington Street
Alexandria, Virginia 22314

EVALUATION: HumRRO is one of the largest behavioral research groups in the nation and certainly one of the most prolific producers of military training-related materials and publications. The majority of HumRRO's work has been Army sponsored*, yet the results of many of their training related projects can be used by all military agencies.

SOURCE OF INFORMATION:

Human Resources Research Organization Bibliography of Publications as of 30 June 1971
Human Resources Research Organization (Sept. 1971)
(This publication can be found in the ERIC files: ED 061 727)

Annual Report - 1972
Human Resources Research Organization

Research Centers Directory (4th edition)

Directory of Data Bases in the Social and Behavioral Sciences
Vivian S. Sessions (Ed.)
Science Associates/International, Inc. (1974)

* In 1972, 68% of HumRRO's revenue came from the Department of the Army.

LEARNING RESOURCES DIRECTORY

PUBLISHER: Engineers Joint Council
345 East 47th Street
New York, N.Y. 10017
(212) 752-6800

DESCRIPTION: Learning Resources is published three times a year by the Engineers Joint Council, a federation of engineering societies in the United States. It is a cross-indexed compilation of information about short courses, seminars, conferences, workshops, media, and other educational activities through which engineers, educators, scientists, and managers may enhance their professional competence.

The Directory is published in April, August, and December. All listings are arranged by sponsor and indexed by subject. Events listed are given up to a year in advance of the Directory announcement.

ENTRY INFORMATION: Some 60 subject areas are surveyed by the Directory. These fall into the general categories of: engineering, agriculture, mathematics, biological and medical sciences, earth sciences, economics, educational technology, oceanics, physics, business and management, and self-development. Information given with an entry includes:

(1) title of event or product,
(2) sponsor,
(3) type of program (i.e. packaged course, lecture series, film, institute, etc.),
(4) cost data,
(5) intended audience,
(6) prerequisite knowledge and/or skills,
(7) topics covered,
and (8) for events, date of event.

CRITERIA FOR INCLUSION: Continuing educational activities within the subject areas surveyed by the Directory and given by some 200 American and Canadian educational institutions are listed in the Directory.

SIZE: The Directory has been published since 1969. It lists and describes annually more than 1000 educational opportunities.

UPDATING PROCEDURES: Issues primarily contain events or products not previously cited. Information listed in the Directory is drawn from a data bank containing completed forms and other literature provided by the organizations sponsoring the events and/or products. Each issue is completely updated with the latest available information.

TECHNICAL INFORMATION: The Directory is available in hardcopy.

TYPICAL USER: Engineers, scientists, managers and educators seeking information about professionally related educational activities.

POTENTIAL USE WITHIN TRAIDEX: The Directory may be used to locate courses of interest to military personnel and instructional materials, such as films and video courses, of use in military training programs. Also, the Directory may point TRAIDEX users involved in program design to individuals

who have designed similar programs or to documentation about similar programs; both resources may provide useful design information

COST: The Directory may be ordered from:

Department JS
Engineers Joint Council
345 East 47th Street
New York, New York 10017

for $24.00/year (3 issues)

EVALUATION: The listings are primarily in engineering or engineering related areas. The Directory does not provide a comprehensive listing of activities within the scope of continuing education in engineering, but many of the major sponsors of such activities are surveyed. Since citations are brief, the Directory's primary use is as an awareness tool pointing its readers to further information.

SOURCE OF INFORMATION: Review of the publication

NOTE: While in publication, the quarterly Continuing Education provided another serial directory to continuing education activities. Compared to Learning Resources, it surveyed a broader range of subject areas and, hence, a broader range of sponsoring institutions. It ceased publication as of October, 1974.

MATERIALS FOR OCCUPATIONAL EDUCATION

PUBLISHER: R. R. Bowker Co., New York

AUTHOR/COMPILER: Patricia Schuman

DESCRIPTION: Materials for occupational education is an annotated list of organizations, primarily subject-oriented (e.g., professional or trade associations), involved in occupational education. Its purpose is to facilitate the location of curriculum and training materials related to occupational education. The materials provided by these organizations include periodicals, books, pamphlets, films, slides, records, tapes, and multimedia kits. The listing is arranged by occupational or curriculum area, and indexed by organization name. Special sections include occupational education in general, a bibliography of background reading, curriculum outlines, an index of occupational categories, and further sources of information. The book is published commercially, and apparently has not been updated or re-published since its publication in 1971.

ENTRY INFORMATION: This book includes professional and trade associations, government agencies, and private businesses. 63 major instructional areas are covered. Entry information typically includes: name and address of organization, brief description or statement of purpose, subject coverage, and brief descriptions and prices of major publications or materials provided.

CRITERIA FOR INCLUSION: The survey is apparently a broad-scale one, including any organization which provides materials related to occupational education.

SIZE: Approximately 600 organizations are listed.

GROWTH: This is a one-time collection, and so far as is known it is not being updated.

TECHNICAL INFORMATION: The book is available in printed form and there is apparently no machine-readable version.

TYPICAL USER: The emphasis is on materials relevant to two-year college instructional programs, but organizations listed also provide career information for occupational files, scholarship information, and materials relevant to vocational high schools and four-year colleges. The book is also useful to public libraries for references to self-instruction and audio-visual materials.

POTENTIAL USE WITHIN TRAIDEX: The book would be used by a TRAIDEX user much as it now used in civilian education, and can be useful at any stage in the instructional development process.

EVALUATION: The book is directed toward training, and many of the instructional areas covered are relevant to military education. The chief value of the book is its comprehensive coverage of organizations involved in training, or providing training materials. The annotations are useful, though brief and non-evaluative. The major deficiencies of the book as an information source are the lack of provisions for updating and the absence of computer support for searching. The book is also an indirect source for specific information needs.

MENTAL MEASUREMENTS YEARBOOK (MMY)

EDITOR: Oscar Buros

PUBLISHER: The Gryphon Press

DESCRIPTION: The MMY is designed to assist its readers in making more intelligent use of standardized tests. It has been published irregularly since 1938*; The Eighth Mental Measurements Yearbook may be published in 1975. Each issue supplements earlier volumes.

The seventh and most recent MMY is the first to be published in two volumes. Its coverage includes tests, books on testing, and other test-related material for the seven-year period 1964-1970, plus some older tests that continue to have wide use and to generate literature. It consists of three main parts:

(1) The heart of the MMY is the section "Tests and Reviews". This section contains informative listings for 1,157 tests. Also given in this section are 798 test reviews by 439 reviewers, 181 excerpted test reviews from 39 journals, and 12,372 references for specific tests. The tests are divided into 15 major classifications: Vocations, Personality, Intelligence, Reading, Mathematics, Science, Foreign Languages, English, Social Studies, Speech and Hearing, Achievement Batteries, Sensory-Motor, Fine Arts, Multi-Aptitude, and a miscellaneous section including tests in an array of different areas.

(2) The section "Books and Reviews" lists 664 books on testing, most of which were published in the years 1964 through 1970 with a few older and a few more recent titles. 299 books appear with reviews excerpted from 86 journals.

(3) One hundred and forty pages are devoted to the six indexes which conclude the MMY. Included are author, test title, and measurement-topic-area indexes.

ENTRY INFORMATION: Information given with each test listed includes:

(1) anticipated subject populations,
(2) availability of
  (a) normative data,
  (b) manuals,
  (c) alternative forms,
  and (d) scoring services,
(3) time required to administer the instrument,
(4) where it may be obtained,
(5) cost,
(6) a list of available references about the instrument,
and (7) a critical review of the test (not in all cases) by qualified personnel.

CRITERIA FOR INCLUSION: Two MMY monographs have appeared since the publication of the 6th Yearbook and prior to the publication of the 7th**. Except for the 113 tests listed only in these documents, the seventh MMY includes:

* Publication dates are as follows: 1938, 1940, 1949, 1953, 1959, 1965, 1972

** Reading Tests and Reviews (1968) and Personality Tests and Reviews (1970).

(a) all tests - new, revised, or supplemented - known to have been published in English-speaking countries during the 1964-1970 period,
(b) tests published earlier but not previously included in an MMY,
and (c) older tests selected for review.

With few exceptions, practically all measurement books published in English and meeting the criteria specified in the "Description" section above are listed in the Yearbook.

GROWTH: 55.6% of the tests listed did not appear in the 6th edition. 38.9% of the tests had been revised since the 6th edition. 5.5% of the listings were from previous entries.

TECHNICAL INFORMATION: The MMY is available in hardcopy

TYPICAL USER: Those interested in determining the research on a particular test or concerned with locating a test for a specific purpose.

POTENTIAL USE WITHIN TRAIDEX: The MMY may be used within TRAIDEX to retrieve information about a particular test or locate a test for a specific purpose.

COST: $70.00

EVALUATION: The MMY is the most extensive collection of information available on tests and related materials. It makes readily available comprehensive and up-to-date bibliographies about tests if more information is desired.

Criticisms commonly given about the Yearbooks include the following: the criteria used by reviewers in their evaluations has been far too variable, and the reviews given are too technical to be used conveniently by the typical person who chooses tests for instructional program application.

SOURCE OF INFORMATION: Inspection of the 7th Yearbook.

NATIONAL REFERRAL CENTER

ORGANIZATION: National Referral Center, U.S. Library of Congress, Science and Technology Division, 10 First Street, S.E., Washington, D.C. 20540 Telephone (202) 426-5670 (referral services) or (202) 426-5687 (general inquires).

DESCRIPTION: The National Referral Center was established in 1962 to provide a means of locating people or organizations ("information resources") with expertise in particular aspects of science and technology. The Center, in response to questions, refers people to individuals or organizations in government, industry, and the academic and professional worlds who have indicated special expertise in the relevant subject. The Center does not itself attempt to answer user's questions or provide literature references.

The data base for this service is a subject-indexed inventory of over 9000 organizations and individuals. The inventory is maintained by a professional staff of resource analysts. Subject coverage is science and technology, including the social sciences.

SERVICES: The primary service of the Center is referrals in response to telephone or mail inquiries. The Center strives for five-day turnaround on requests. They also publish a series called A Directory of Information Resources in the U.S., with separate volumes by subject area. Occasionally the Center publishes special lists of selected information resources in particular subject areas.

ENTRY INFORMATION: The Center provides the individual's or organization's name, address, telephone number, and an indication of what kinds of information the user is likely to receive.

CRITERIA FOR INCLUSION: The Center includes all organizations or individuals who respond to their questionnaire and are likely to provide useful information on some aspect of science and technology.

SIZE: Approximately 9000 entries.

UPDATING PROCEDURES: The Center sends questionnaires to potential sources of information, the responses to which are used to update the data base.

TECHNICAL INFORMATION:

Storage Medium: Tape

Computer Specifications: The Center uses the 370/155 and 370/145 at the the Library of Congress.

Software Used: Programs used for in-house searching are adaptations of the MARC II system.

TYPICAL USER: The services provided by the Center are such that they could be used by anyone needing either general or specific information on some aspect of science or technology.

POTENTIAL USE WITHIN TRAIDEX: The TRAIDEX user is likely to find the Center of value in situations where he has information needs outside his area of expertise (and therefore needs references to appropriate organizations)

or where he wants to generally locate organizations doing similar or related work.

COST DATA: The referral service is provided free to anyone, as are the occasional lists of particular information resources. The Directories may be purchased from the Government Printing Office.

EVALUATION: The Center should be regarded as yet another information service of which those involved in military training should be aware, and to which they can go when conventional information sources (such as bibliographic and abstracting services) do not yield satisfactory results. The referral approach is consistent with the way many researchers prefer to operate, and in fact might be regarded as one alternative model for TRAIDEX itself.

In terms of its "information" content, since responses are tailored to individual needs the Center is clearly relevant to training, it is easy to use, and the information base is continually updated. Responses are necessarily limited by the fact that they are indirect references to potential answers, rather than the answers themselves.

SOURCES OF INFORMATION: (1) Encyclopedia of Information Systems and Services (Anthony T. Kruvas Associates, 1974); (2) Educational Media Yearbook (R.R. Bowker Co., 1974).

NATIONAL TECHNICAL INFORMATION SERVICE

ORGANIZATION: National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, Virginia 22151
(703) 321-8500 (451-0560 for NTISearch)

DESCRIPTION: The National Technical Information Service (NTIS) was established to consolidate and improve information services of the U.S. Department of Commerce and 150 other government organizations, and to simplify and facilitate public access to government publications and data files. It collects, catalogs, and disseminates unclassified, government-supported technical reports, translations, and data, and provides a number of reference and referral services. In so doing it serves as the primary focal point within the Federal Government for Federal publications and data files.

The documents in the NTIS collection cover the full range of subjects characterized by the COSATI Subject Category List, including scientific, social, and economic research, as well as documents and magnetic tapes containing business, management, transportation, and state and local information. The documents, which date back to 1946, include both domestic and foreign items.

NTIS is also commissioned to assist in the effective dissemination of business and statistical information, and to acquire, abstract, index, and announce such information; to explore and develop new means for making the results of technological research and development more readily available; to investigate and implement with the commercial information industry ways in which it can better contribute to the useful and efficient dissemination of information handled by NTIS; to provide a center for the distribution of the outputs of specialized documentation and information analysis centers; and to perform any other necessary functions in the dissemination of scientific, technical and other information. The Information Services Branch of NTIS serves as a reference center, compiling general subject bibliographies and performing, for a fee, in-depth NTIS document searches via NTISearch, an on-line, interactive retrieval system.

Requested source materials are disseminated on paper copy, microfilm (for pre-1964 reports), and microfiche. Microfiche is available for most recent reports. Some documents are available on magnetic tape or punched cards. All accessioned documents are permanently available.

SERVICES: NTISearch is an on-line, interactive retrieval system which provides easy and rapid access to the NTIS catalog. Users can request a search by calling NTIS, or can connect through the Lockheed Information System. Searching is done on the descriptor and index terms (see entry information below).

Government Reports Announcements (GRA) is a semimonthly journal that abstracts unclassified government-sponsored reports and translations. Abstracts are arranged by the COSATI subject fields and groups.

Government Reports Index (GRI) is the index to GRA. GRI provides subject, personal author, corporate author, contract number, and accession/report number indexes. Quarterly and annual cumulations are published separately.

Government Reports Topical Announcements (GRTA) are 36 separate semimonthy extracts from GRA, each covering a specific subject area.

Fast Announcement Service (FAS) is a group of publications highlighting selected new reports received by NTIS for public sale. All documents received by NTIS are reviewed by technologists for their industrial significance, and approximately 10 percent are selected for inclusion in FAS. There are 57 separate subject-oriented issues. The frequency of issue varies with the subject category.

Selected Water Resources Abstracts (SWRA) is a semimonthly announcement of scientific and technical literature on the water-related aspects of the life, physical, and social sciences. SWRA is published for the Water Resources Scientific Information Center.

Selected Categories in Microfiche (SCIM) is a standing order service designed to provide copies of reports in several hundred highly selective fields of interest. Documents can be ordered by subject category, originating agency, or a combination of both. The basic SCIM categories are the subject fields and groups used to announce new documents in Government Reports Announcements; SCIM may also be ordered by the subject categories used in the Fast Announcement Service or the announcement categories used by NASA and AEC in their abstract journals. Moreover, users may order all documents announced in a given category, or only those announced as of prime relevance, which eliminates documents cross-referenced to another category. Users ordering two or more categories receive only one copy of a document announced in both. Documents on standing order through SCIM service cost $0.35 each.

The Joint Publications Research Service (JPRS) selects and translates R & D literature from throughout the world. The JPRS standing order service provides automatic mailing of translations as they become available.

The NTIS Bibliographic Data File is a file containing all current abstracts of Government-sponsored reports, from which GRA and GRI are prepared. Current-issue tapes are released on a semi-monthly basis. Back issues are available from July 1, 1964. The tapes are provided on a lease basis.

NTIS Directory of Computerized Federal Data Files and Related Software is a comprehensive source book for computer-generated federal data files, data bases, and related software. The 1974 issue references more than 70 groups of data files from 60 federal agencies.

Special Bibliographies are occasionally produced, using NTISearch, on selected topics. Some of the more relevant ones for TRAIDEX are: Management Games (163 abstracts); Computer Aided Instruction (1970-74: 252 abstracts); Management Information Systems (208 abstracts); and Manpower Management Studies (58 abstracts).

ENTRY INFORMATION: The NTIS data base consists chiefly of technical reports and publications; books are generally not included. Each entry contains the following information: title, author(s), report number, date of report, pagination, contract number, author's abstract, descriptor terms, identifiers, accession (order)number, and NTIS price.

The Thesaurus of Scientific and Engineering Terms is used to index entries. NTIS accepts the descriptors assigned by other agencies for reports received via magnetic tape. Approximately 15 subject entries are assigned to each document. Indexes are prepared by: subject, personal author, corporate author, contract number, and accession/report number.

CRITERIA FOR INCLUSION: All materials received by NTIS are included in the data base. Over 225 agencies provide input to NTIS.

SIZE: NTIS currently holds over 775,000 titles. Of these, approximately 100,000 are in current stock.

GROWTH: Approximately 50,000 titles are added per year.

UPDATING PROCEDURES: Virtually all federal agencies contribute to the NTIS collection. Some of the major ones are the National Aeronautics and Space Administration, the Atomic Energy Commission, the National Library of Medicine, the National Agricultural Library, and the Department of Defense. NTIS does not independently locate other materials. Document input is irregular.

TECHNICAL INFORMATION:

Storage Medium: The Bibliographic Data File is on tape (7 or 9 track, 556 or 800 BPI, odd parity). The file currently consists of approximately 250 reels; new reels are produced semi-monthly, and are available on on a lease basis.

Computer Specifications: NTIS uses a Univac 1108 and an IBM 360/25. Lockheed Information Systems is used for access to the bibliographic files.

TYPICAL USER: NTIS services are available to government, industry, and the general public. Users range from students to managers to researchers.

POTENTIAL USE WITHIN TRAIDEX: Since NTIS coverage is very broad, it could be used at any stage in the instuctional development process. Its information coverage would be of interest to practitioners as well as researchers.

COST: NTISearch costs $50 for up to 100 abstracts, and $25 for each additional 50 abstracts. GRA costs $52.50 per year ($67.50 foreign). GRI costs $57.50 per year ($67.50 foreign). GRTA costs $5.00 per category per year ($6.25 foreign) except for the library and information science category, which costs $12.50 ($15.00 foreign). FAS costs $5.00 per year. SWRA costs $22.00 per year ($27.50 foreign). Documents on standing order through SCIM cost $0.35 each. JPRS translations cost about $3.00 per document. The NTIS Bibliographic Data File is available under various lease plans. (Cost data as of 1972).

EVALUATION: NTIS provides the single most comprehensive coverage of U.S. Government reports in the technical fields. The information content is clearly relevant to training, though it covers many other areas as well and training-related items represent only a part of the data base. The NTISearch service is useful and relatively easy to use, though selection of the proper subject terms is often a chore. Entries are not evaluated and the abstracts are not verified. The chief advantage of NTIS is that it represents a continuing effort to catalog and disseminate all relevant federal materials.

SOURCE OF INFORMATION: (1) NTIS Directory of Computerized Federal Data Files and Related Software; (2) Encyclopedia of Information Systems and Services; (3) Selected Federal Computer-Based Information Systems (Information Resources Press, Washington, D.C.); (4) Use of NTISearch; (5) Technology in Public Elementary and Secondary Education: A Policy Analysis Perspective (Stanford Research Institute Report EPRC 2158-3, April 1974).

PSYCHOLOGICAL ABSTRACTS INFORMATION SERVICE

COMPILER/PUBLISHER: American Psychological Association
1200 Seventeenth St., N.W.
Washington, D.C. 20036

DESCRIPTION: Psychological Abstracts (PA) is a monthly publication containing nonevaluative summaries of the literature in psychology and related disciplines. Over 800 journals, technical reports, monographs, and other scientific documents provide material for coverage in PA.

Each monthly issue of PA contains abstracts listed under 17 major classification categories, with some categories having subsections. The abstracts are arranged in alphabetic order by author under the headings and are numbered consecutively through the year. A cumulative subject and author index has been published for the 36-month period 1972-74.

Entries published since 1967 have been stored on machine-readable magnetic tapes, which provide the basis for automated search and retrieval services known as Psychological Abstracts Information Services (PAIS). In addition to PA, PAIS consists of three services: Psychological Abstracts Search and Retrieval (PASAR), Psychological Abstracts Tape Edition Lease and Licensing (PATELL), and Psychological Abstracts Direct Access Terminal (PADAT).

PASAR is a computerized retrieval service which is available to users by mail. Requests are made in natural language terms and/or in the index terms used by PA. APA provides a request form which may be filled out and sent to APA for processing. PATELL is a tape leasing arrangement under which users may receive quarterly or monthly tapes of the PA file. PADAT is a service provided through the Lockheed Dialog Information Retrieval Service. Users with a teletype-compatible terminal and access to the Dialog system may use PADAT to search the PA files.

ENTRY INFORMATION: The information provided in a PA abstract or annotation, and therefore accessible through PASAR and PADAT, covers the following:

- Author(s) or editor(s)
- Affiliation of first-named author or editor
- Article, book, or chapter title, including subtitles
- Bibliographic data (publisher, publication date, pagination, etc.)
- Text of abstract (or annotation, if a book)
- Reference to a previous entry in PA
- Number of references (if 15 or more)
- Abstract Source
- Price (if book)

PA coverage includes a wide range of subjects and sources. Of particular interest to TRAIDEX are the psychometrics and statistics, educational psychology, and applied psychology categories. A number of military journals and publications are included.

CRITERIA FOR INCLUSION: APA has a list of over 800 journals which are regularly abstracted. Books, monographs, and technical reports which are deemed relevant by APA staff are also included.

SIZE: The machine-readable data base contains about 140,000 documents as published in PA since 1967.

GROWTH: An average of 24,000 bibliographic citations are added per year.

UPDATING PROCEDURES: PA is issued monthly, and tapes provided under PATELL are usually issued quarterly. In addition to the approximately 800 journals covered, sources include Dissertation Abstracts, proceedings of the annual APA conventions, and published technical reports.

TECHNICAL INFORMATION:

Storage medium: Tape

Computer specifications: PASAR uses an IBM 360/50 computer.

Software used: For the PASAR service APA uses an in-house system written in ALC. PADAT services are provided through DIALOG, a proprietary product of Lockheed Information Systems.

TYPICAL USER: PAIS services are utilized by a variety of people, including students, researchers, and commercial users.

POTENTIAL USE WITHIN TRAIDEX: Since PAIS coverage is fairly broad, the services could be useful at any stage in the instructional development process. The value of PAIS is primarily in directing the user to articles or books of potential interest, since the abstracts are nonevaluative.

COST DATA: PASAR costs are based on the amount of computer time required to perform the search, which in turn is a function of the complexity of the search (not the number of citations retrieved). Charges typically range from $40 to $60 per search. The lease fee for tapes under PATELL is $3000 for the current year, $2000 for the immediately preceeding year, and $800 for each year prior to that. Licensing arrangements have not yet been worked out.

EVALUATION: PAIS is only marginally relevant to training; however, since computer support is provided through PASAR and PADAT the user can focus his request in such a way as to eliminate non-training related items. More importantly, the PA file is the primary resource in its field, and that field is one with wide-ranging cross-disciplinary significance. Moreover, the file is continually updated and thus provides an important reference source for new results or developments in education.

SOURCES OF INFORMATION: (1) Guide to Psychological Abstracts Information Service (American Psychological Association, 1975); (2) Encyclopedia of Information Systems and Services (Anthony T. Kruzas Associates, 1974); (3) Computer-Based Reference Service (American Library Association, 1973);

REGISTRY OF RESEARCH AND INVESTIGATION IN ADULT EDUCATION-1972

EDITOR: Stanley M. Grabowski

PUBLISHER: Adult Education Association of the U.S.A.
in Cooperation with the ERIC Clearinghouse on
Adult Education*

DESCRIPTION: This is the eighteenth and most recent of an annual compilation of research and data gathering investigations in adult education. Each issue primarily covers investigations completed and reported since the last issue. From 1955 through 1967, the quarterly publication Adult Education carried the review in its summer issue. In 1968, it became a separate publication of the Association in cooperation with the ERIC Clearinghouse. Issues since 1967 are in the ERIC microfiche collection (1967-ED 012 877, 1968-ED 023 993, 1969-ED 030 774, 1970-ED 045 866, 1971-ED 056 263, 1972-ED 074 333).

ENTRY INFORMATION: A variety of subject areas are covered in the compilation, including adult learning characteristics; program planning and administration; learning environments; instructional methods; curriculum materials and instructional devices; personnel and staffing; education of particular groups, like the poor or Spanish speaking; program areas, like adult basic education; professional and technical continuing education; occupational training; and studies related to particular institutions, such as the federal government and the armed forces. Previous issues of the register have a similar range of subject coverage.

The studies are classified by a rough set of categories used by the ERIC Clearinghouse at the time of the Register's development. Along with an abstract of the entry is given the study's name, investigator, institutional sponsor, date of publication, pagination, and information concerning the study's availability.

CRITERIA FOR INCLUSION: Dissertation Abstracts, CIJE, RIE, and the NTIS files were the sources used to locate the cited studies. To keep the listing manageable in size, many relevant dissertations are not included in the listing.

SIZE: 528 entries

GROWTH: The number of entries in the 1970 register is 750. 578 entries are listed in the 1971 listing. The 1972 listing is smaller still. This trend is explained by the decision to limit the number of dissertations cited.

TECHNICAL INFORMATION: The register is available both in hardcopy and microfiche.

TYPICAL USER: A broad array of topics related to adult education are included in the register. Hence, the register appeals to a diverse group of educational personnel involved in adult education.

* The Clearinghouse on Adult Education has since joined the Vocational and Technical Education Clearinghouse to become the Clearinghouse on Career Education.

POTENTIAL USE WITHIN TRAIDEX: The Register can be used as a preliminary retrieval tool for research findings in areas of Adult Education prior to 1973.

COST DATA: Available from the ERIC Reproduction Service: MF $.65, HC $9.87
ED 074 333
Available from publisher: $7.00

EVALUATION: The Register contains research studies of interest to military training personnel in design and development. In fact, many of the studies have been prepared by military agencies, or by non-military agencies for military agencies. The Register lacks a good indexing scheme. The classification of articles that is used is not refined enough for convenient retrieval of useful documents.

SOURCE OF INFORMATION: Inspection of the 1971 and 1972 Registers.

SCIENCE TEACHING CENTER

DIRECTOR: David Lockard

LOCATION: University of Maryland
College Park, Maryland 20742
(301) 454-2024

DESCRIPTION: The Center is involved in a variety of activities relating to the teaching of science and mathematics. For example, it is involved in the collection of innovative non-commercial curriculum materials in science and mathematics, the collection and review of commercially available science teaching materials, the construction and evaluation of inexpensive science teaching equipment, and the training of teachers in the areas of mathematics and science education.

The Center publishes books and reports. Recent samples of these are a compendium of classroom scientific experiments called the New UNESCO Source Book for Science Teaching, and a series of three books, each titled Guidebook to Improvising Inexpensive Science Teaching Equipment-Worldwide, with subtitles of Biology, Chemistry, or Physics. The series is based on an extensive international study and collection effort and presents construction specifications for equipment needed in teaching science laboratories (e.g., microscopes, test tubes, etc.)

Of greatest significance to TRAIDEX is the Center's extensive library of curriculum materials. The Center edits reviews of commercially produced science curriculum materials for two journal publications. This activity has resulted in the maintenance of a comprehensive library of commercially produced instructional materials. The Center also maintains the International Clearinghouse on Science and Mathematics Curricular Developments. This Clearinghouse gathers non-commercially produced mathematics and science instructional materials.

In-house indexes are maintained for both the commercial and non-commercial collections. The Clearinghouse has, since about 1962, periodically published the International Clearinghouse Report (now in its eighth edition). Each report contains a collection of descriptions of curriculum and material developments that have been entered into the Clearinghouse collection since the publication of the last report. The Clearinghouse is soon to publish Science and Mathematics Curricular Developments Internationally: 1956-1974. This is a descriptive compilation of most of the curriculum developments in the Clearinghouse collection.

The Center is presently working on a computer system which will index its curriculum holdings and retrieve curriculum products matching the specific needs of user groups.

ENTRY INFORMATION: Descriptions contained in each International Clearinghouse Report are written by the project directors responsible for the curriculum development program. All program activities occurring since the last Report are described. Detailed information is provided with each completed curriculum product entry, including course content and objectives, descriptions of modes of presentation, appropriate grade levels, and descriptions of supplementary materials. Information concerning how completed materials may be obtained is given. Approximately half of the entries cited are from the United States and half from other countries.

Science and Mathematics Curricular Developments will contain keyed data sheets about its entries. The original product producers were asked to prepare the data sheets; not all producers responded. Hence, not all of the Clearinghouse's holdings will be described in the publication. If an entry has a more detailed description in an earlier Report, notation on the data sheet indicates in which edition it may be found.

CRITERIA FOR INCLUSION: The Clearinghouse collects all non-commercial materials considered innovative in methodology. For example, all NSF sponsored curriculum materials are candidates for inclusion into the Clearinghouse files. Collection efforts are international and include all grade levels from early childhood to graduate education. All the software of a development and those pieces of hardware considered unique are collected.

Collection of commercial materials is restricted to U.S. products in the elementary and secondary grade levels. Non-print media received from producers is held only for short periods and then returned to the producers. The collection is primarily print media, with some science teaching equipment included.

SIZE AND GROWTH: The present size of the collection is extensive and rapidly growing. No good estimate of the size or growth rate was available.

UPDATING PROCEDURES: Program descriptions in the Report and in the Science and Mathematics Curricular Developments are written by the program directors. Each Report supplements the last.

TECHNICAL INFORMATION: Indexes to the Clearinghouse files are available in hardcopy. The Center is presently designing a machine readable index to its collection. All curriculum materials are kept in the form in which they were received by the Center.

TYPICAL USER: Curriculum designers and developers in the area of science or mathematics education wishing to survey existing curriculum developments.

POTENTIAL USE WITHIN TRAIDEX: The Center can be contacted by TRAIDEX users to answer questions about the availability of commercial or non-commercial materials in science- or mathematics-related subject areas. The Center's non-commercial holdings can be surveyed through Clearinghouse publications by users desiring specific materials or wishing to survey existing developments. Onsite use of the collection is permitted by the Center and may be an efficient way for TRAIDEX users to further examine and evaluate materials.

COST: The Clearinghouse Reports are available from the Center at $2.00 each. Science and Mathematics Curricular Developments is available from the Center for $5.00. Inquiries will be answered free of charge.

EVALUATION: The Science Teaching Center maintains an extensive and unique collection of science and mathematics curriculum materials; its commercial holdings are restricted to elementary and secondary levels, but its non-commercial holdings include post-secondary level materials. The Center provides a convenient resource for information concerning curriculum developments in science and mathematics; it can also provide useful information about the methodology of science and mathematics teaching

or refer the inquirer to other sources for that information.

SOURCE OF INFORMATION: David Lockard
Director of the Science Teaching Center and
the International Clearinghouse on Science and
Mathematics Curricular Developments.

SMITHSONIAN SCIENCE INFORMATION EXCHANGE

PUBLISHER/COMPILER: Smithsonian Science Information Exchange, Smithsonian Institution, 1730 M Street, N.W., Washington, D.C. 20036, (202) 381-5511.

DESCRIPTION: The purpose of the Science Information Exchange (SIE) is to facilitate the planning, management and coordination of scientific research and development by collecting and disseminating information on current research projects supported by the U.S. Government, foundations, and other agencies. SIE maintains a computerized file of project descriptions, the two most recent years of which are stored on-line (back files are stored on archival tapes). SIE provides computerized searches of these files, producing single-page descriptions of relevant on-going research projects. They also organize, tabulate, and summarize data on research support, prepare surveys of research activity, and produce, on contract, catalogs of on-going research.

Information is typically disseminated in computer-printed form, though machine-readable versions are also available. Services are available to anyone.

ENTRY INFORMATION: SIE covers currently active basic and applied research projects in the life, physical, agricultural, social, behavioral, earth, and engineering sciences. It is limited to projects at an early stage, typically prior to research results and publications. The project descriptions contain the following information: project title, principal investigator(s), name and address of performing organization, source of support, project dates, amount of funding (if given by submitting agency), and a brief summary of the intended research.

SERVICES: SIE provides four types of services: custom searches, monthly current awareness (monthly updates to a search), research information packages (predesigned searches which are performed quarterly), and special services (surveys, data tabulations, catalogs, etc.). SIE scientists formulate the search, so that the user does not need to learn the subject classification scheme, and also screen the results for information relevance. Searches can be by scientific subject area or by administration data (organization, researcher, state, etc.). Most searches use the "active" file, but SIE can also perform an archival search.

CRITERIA FOR INCLUSION: SIE has arrangements with a variety of types of agencies for submittal of project information. All on-going basic and applied research is covered, and no projects are rejected if they meet this criteria.

SIZE: The "active" file, containing approximately two years of data, averages 170,000 entries. The total number of projects entered since SIE began in 1949 is approximately 800,000.

GROWTH: About 100,000 projects are entered each year.

UPDATING PROCEDURES: Over 1300 Federal and non-Federal organizations which deal with research submit project descriptions to SIE. No

accuracy checking is done, and no published literature is used to augment or supplement these sources. SIE subject experts do the subject indexing. Updating is done daily.

TECHNICAL INFORMATION:

Storage medium: Tape and disk. The "active" file is stored on disk for interactive retrieval.

Computer specifications: SIE currently has a 370/135 which is dedicated to the project.

Software used: SIE has its own retrieval system.

Transportability: Records are stored in a manner which facilitates interchange. Transportability of the entire system is not an issue since SIE maintains an on-going service.

TYPICAL USER: Researchers, research managers, and administrators. The service is typically used to survey research directions, identify approaches, identify investigators, or locate sources of funding.

POTENTIAL USE WITHIN TRAIDEX: SIE could be used to identify relevant research on any aspect of the instructional development process. Of particular interest are the "education and training" Research Information Packages (DO series), and a package on task analysis (DP02A).

COST DATA: Custom searches cost $50 for up to 50 summaries ($10 additional per 50 documents over the first 50). Research Information Packages are typically $35 each. The monthly update to a search (current awareness service) costs $15 per month.

EVALUATION: Because of its broad coverage only a small portion of the SIE data base is specifically relevant to training. Nevertheless, because it provides information before research reports are available it is likely to be of some use in early identification of potentially significant research results. Moreover, it is the most comprehensive collection of its kind and thus obviates the need for monitoring individual agency listings (such as the NSF publications on research grants).

The SIE data base is continually updated and is supported by computer searching services. Subject specialists at SIE also formulate the query so that the user does not need to learn the indexing scheme.

Since SIE does not check the accuracy or currency of entries the service is useful primarily for locating relevant research projects. The user can then communicate directly with the project to obtain more detailed information and early results.

SOURCES OF INFORMATION: "SSIE Science Newsletter" (Smithsonian Science Information Exchange); Encyclopedia of Information Systems and Services (Anthony T. Kruzas Associates, 1974); Selected Federal Computer-Based Information Systems (Information Resources Press, Washington, D.C., 1972); Handbook of Data Processing for Libraries (Wiley-Becker-Hayes, 1970).

TASK INVENTORY EXCHANGE

AUTHOR/PUBLISHER: The Center for Vocational and Technical Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210.

DESCRIPTION: The Task Inventory Exchange is a new project of the Center for Vocational and Technical Education (see description under "Abstracts of Instructional and Research Materials in Vocational and Technical Education"). Its purpose is to collect task inventory data, publish abstracts and indexes to this data, and provide microfiche and printed copies of the documents. The first directory is scheduled for publication in February, 1975, with a second directory to be be published later in the year. The project is supported by the Bureau of Occupational and Adult Education of the U.S. Department of Health, Education and welfare.

ENTRY INFORMATION: The abstracts of task inventories will include such information as: author, title, institution and sponsoring agency, grant identifiers, publication data, availability, occupational areas, number of tasks, USOE subject code to classify jobs, and the International Standards of Occupations codes. Indexes will also be provided.

SIZE: The first directory will contain 77 document citations. The second directory is expected to contain approximately 100 citations.

UPDATING PROCEDURES: The center is conducting a wide-scale search for task inventories, and will publish directories as the information become available.

TECHNICAL INFORMATION: The data is not presently computerized since it is not clear how large the data base will be or what updating cycle should be used.

POTENTIAL USE WITHIN TRAIDEX: The directories would be useful in locating task inventories during the design phase of the instructional development process.

COST DATA: The first directory is expected to be priced at $2.50.

EVALUATION: Since the directories have not yet been published it is difficult to evaluate them relative to the types of task inventories included or the comprehensiveness of the coverage. However, so far as is known this is the only effort in the country to systematically collect and disseminate information on task inventories. Because of the Center's focus this project should produce information which will be highly useful to TRAIDEX.

SOURCE OF INFORMATION: The Center for Vocational and Technical Education, (614) 486-3655.

TRAINING METHODOLOGY

SPONSOR: U.S. Department of Health, Education and Welfare
Health Services and Mental Health Administration

DESCRIPTION: This 1969 publication is a four-part annotated bibliography of documents representing thought on training methodology The first part pertains to research and theory on individual behavior, group behavior, and educational and training philosophy. The second pertains to aspects of instructional design, course planning, and training program administration. The third covers specific instructional methods and techniques. The last cites documents concerned with the media aspects of training and contains selected references on audiovisual theory and methods, aids, facilities, and equipment.

Content for the publication was selected primarily from materials published between January 1960 and March 1968. Citations are arranged in a classified order; a more extensive subject index is provided with each part of the bibliography.

ENTRY INFORMATION: Given with each citation is bibliographic data and an abstract. Many of the abstracts were borrowed from other publications.

CRITERIA FOR INCLUSION: Literature surveys were conducted resulting in a collection of over 6,000 possible items. From this a subset of pertinent documents was chosen. The bibliography is not comprehensive.

SIZE: Some 1400 documents are cited in the bibliography.

UPDATING PROCEDURES: Introductory remarks given in the document indicate that the bibliography is expected to be ongoing Public Health Service Publication.

TECHNICAL INFORMATION: The bibliography is available in hardcopy and on microfiche.

POTENTIAL USE WITHIN TRAIDEX: Training personnel desiring a review of the literature on specific aspects of the instructional development process may use the document as a search tool for the 1960-1968 period.

COST: The bibliography is available in hardcopy from the Government Printing Office for $3.75 and on microfiche from the ERIC Reproduction Service:

Part 1 - ED 034 034	$ .50
Part 2 - ED 034 035	$ .75
Part 3 - ED 034 033	$ .50
Part 4 - ED 034 032	$ .75

EVALUATION: The bibliography provides an excellent survey of the literature for the period specified. Although relevant documents are not included, the bibliography does present a representative sample of thought on Training Methodology as of March, 1968.

SOURCE OF INFORMATION: Review of document.

VOCATIONAL INSTRUCTIONAL MATERIALS FOR TECHNICAL EDUCATION AVAILABLE FROM FEDERAL AGENCIES
VOCATIONAL INSTRUCTIONAL MATERIALS FOR TRADE AND INDUSTRIAL OCCUPATIONS AVAILABLE FROM FEDERAL AGENCIES
VOCATIONAL INSTRUCTIONAL MATERIALS FOR HEALTH OCCUPATIONS AVAILABLE FROM FEDERAL AGENCIES

COMPILER: Northwest Regional Educational Laboratory
500 Lindsay Building, 710 S.W. Second Avenue
Portland, Oregon 97204 Telephone (503) 224-3650

DESCRIPTION: The three documents cited are part of a series of seven documents representing the findings of a survey conducted by the Laboratory during 1970-71. All of the documents are available either from the U.S. Government Printing Office or from the ERIC reproduction service. The other four documents cover the instructional areas of agriculture, distributive education, home economics, and office education. Although they may contain items of interest to the TRAIDEX user, their utility is marginal and only the three documents cited at the beginning of the form will be discussed below.

ENTRY INFORMATION: The instructional materials have been identified with the instructional titles and codes from a detailed classification system developed by the Office of Education. This system provides a distinct identity for each educational program area (such as "Technical Education") and for each of the classified items of information within it (such as "Engineering-related Technology"). Definitions of all classification levels are provided in all three documents.

Information given about the instructional materials includes the following:

1. The title, publication date, number of pages, and the author or corporate author.
2. A brief annotation of the type of document and its potential use.
3. Information of special interest, if present.
4. Major subject terms contained within the contents of the document.
5. The instructional areas or programs to which the document has been assigned.
6. The source from which the materials may be obtained and their price.

Almost all of the items listed fall into one of the following categories:

A textbook or reference book which may be used as a resource material
A pamphlet or guidebook which may be used as a resource material
A serial publication which may be used as a resource material
A textbook or guidebook which may be used in curriculum design
A training manual

The several listings not described by one of the above categories include programmed textbooks, catalogs, workbooks, and fact sheets.

The audience level for the majority of instructional materials cited is post-secondary. The remaining items are for secondary-level audiences.

At the end of each of the three documents is a list of materials which has general application to all areas of vocational education.

CRITERIA FOR INCLUSION: The instructional materials were produced by federal agencies. The majority of materials listed were not produced specifically for use within education. The compilers included them as potentially useful instructional resources. The definitions of instructional areas provided by the Office of Education were closely adhered to in classifying all instructional materials.

SIZE: Over 300 materials are listed in the area of Technical Education, over 400 in the area of Trade and Industrial Occupations, and over 200 in Health Occupations.

Of the topics of interest to TRAIDEX users in the list of "General Application" materials, there are 15 related to Basic Education, about 200 described as Related-education Materials, about 100 concerned with Guidance and Counseling, and 8 related to Teacher Education.

UPDATING PROCEDURES: No plans for updating are cited in the documents.

TECHNICAL INFORMATION: The documents are available in microfiche and hard-copy.

TYPICAL USER: Vocational educators involved in curriculum design or classroom instruction.

POTENTIAL USE WITHIN TRAIDEX: The TRAIDEX user can use these documents to locate aids to curriculum design and student-oriented textbooks and manuals related to the instructional areas surveyed. The documents also can be used to locate both student-and teacher-oriented reference books.

COST DATA: Source: Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

Technical Education - $1.25
Stock No. 1780-0841; Cat. No. HE5.10:V85TE
Trade and Industrial Occupations - $1.50
Stock No. 1780-0842; Cat. No. HE5.10:V88TR
Health Occupations - $1.00
Stock No. 1780-0838; Cat. No. HE5.10:V85HE

Source: ERIC Reproduction Service

Technical Education - MF $.65, HC $6.58,
ED 058 450
Trade and Industrial Occupations - MF $.65, HC $6.58
ED 058 449
Health Occupations - MF $.65, HC $3.29
ED 058 445

EVAULATION: The broad range of agencies surveyed by the Laboratory has resulted in a listing of materials covering all aspects of vocational education. The materials range from documents with broad coverage, such as a catalog of scientific and technical societies pertinent to technical education, to documents covering more narrowly defined areas, such as the medical aspects of nuclear fallout or the specifications of a specific mechanical instrument. The chief value of the listing is in providing

information about the latter type of instructional materials, materials with comprehensive coverage of narrowly defined areas of vocational education.

The annotations are brief and do not provide an adequate description of the materials cited. The major deficiencies of the documents, though, are the absence of evaluative information and provisions for updating.

SOURCE: Review of documents on ERIC microfiche.

VOCATIONAL-TECHNICAL LEARNING MATERIALS: BOOKS AND MANUALS FOR SCHOOLS AND COMMUNITY COLLEGES, SECOND EDITION

EDITOR: Bruce Reinhart

PUBLISHER: Bro-Dart, Inc.

DESCRIPTION: The purpose of this 1974 publication is to present a dependable and useful annotated collection of book and periodical titles to be used as a selection guide for newly emerging institutions and programs of occupational education. This second edition serves to update and expand the first edition, both in the number of entries listed and in the range of subject matter included. Nine new subject areas are represented, making a total of forty-one. The selection of books and journals serve programs to train both the in-school age and the out-of-school age groups.

ENTRY INFORMATION: The collection comprises three categories of materials:

(1) Titles to be used in classroom instructional programs, such as classroom texts, supplementary reference materials, and shop and laboratory manuals. Specialty items such as industrial and business literature and pamphlets are also included if they are useful in classroom instruction.
(2) Tools for vocational education administrators and others related to the ancillary services of vocational education, such as librarians, researchers, and counselors.
(3) Trade and professional journals.

For each entry, the following information is provided: author, title, publisher, pagination, date, grade level, price, annotation, and a ranking which reflects the selection's educational value for that subject area. Subject and author indexes are provided.

CRITERIA FOR INCLUSION: The materials selected for inclusion have direct relevance to vocational-technical education. They relate to non-professional instructional programs requiring less than a baccalaureate degree to complete.

SIZE: The listing includes 5167 books and 394 journals.

GROWTH: The first edition contained 3616 books and 369 journals.

UPDATING PROCEDURES: No updating plans are specified in the editor's introductory remarks.

TECHNICAL INFORMATION: This publication is available in hardcopy.

TYPICAL USER: The collection is used by vocational educators, librarians, counselors, and other educators dependent upon materials related to vocational-technical education.

POTENTIAL USE WITHIN TRAIDEX: To alert TRAIDEX users involved in curriculum design and development of possible learning and resource materials.

COST: This publication is available from:

Bro-Dart, Inc.
1609 Memorial Ave.
Williamsport, Pennsylvania 17701

Cost: $35.00

EVALUATION: Many areas relevant to military training are surveyed in this collection. The subject index is extensive, providing convenient entry into sections of interest.

Although only documents thought relevant to their subject area are included in the collection, no evaluation of their effectiveness as resource or learning materials is given. No plans for updating the listing are cited, but, because the collection is sponsored by Ohio State University's Center for Vocational and Technical Education, it is likely that future editions will be issued.

SOURCE OF INFORMATION: Inspection of the book.

Index to the Catalog

Entries in the catalog are arranged in alphabetical order. The following scheme places the catalog entries into those activities of the instructional development process where their information services are of most value. Five general activity areas are distinguished and described.

1. Decision Making

Included are the activities of managing instructional development programs, such as identifying needs, determining priorities, organizing personnel, and formulating goals.

Education Index 29
Educational Administration Abstracts 30
Educational Resources Information Center 37
National Referral Center 58
National Technical Information Service 60
Smithsonian Science Information Exchange 70
Training Methodology 73

2. Refinement of the Instructional Setting

Included are activities which attempt to determine the status quo, like assessing student entry conditions or the state-of-the-art in a particular subject area.

Battelle Memorial Institute 14
Clearinghouse for Applied Performance Testing 18
Educational Resources Information Center 37
Educational Testing Service Test Collection 42
Human Resources Research Organization 51
Mental Measurements Yearbook 56
National Referral Center 58
National Technical Information Service 60
Smithsonian Science Information Exchange 70

3. Design of the Instructional Program

Included are activities like analyzing tasks, formulating instructional objectives, and selecting appropriate instructional strategies. (Selecting appropriate measures of student success is not covered in this category.)

Abstracts of Instructional and Research Materials
in Vocational and Technical Education 12
Education Index 29
Educational Media Yearbook 32
Educational Resources Information Center 37
Encyclopedia of Educational Research 46
Human Resources Research Organization 51
National Referral Center 58

National Technical Information Service 60
Psychological Abstracts Information Service 63
Registry of Research and Investigation in Adult Education 65
Science Teaching Center 67
Smithsonian Science Information Exchange 70
Task Inventory Exchange 72
Training Methodology 73

4. Construction of the Program Prototype

Included are the activities which implement the program design specifications, such as selecting media.

Abstracts of Instructional and Research Materials in Vocational and Technical Education 12
Battelle Memorial Institute 14
Catalog of National Institute of Education Products 16
A Comparison of Guides to Non-Print Media 19
Computer Education and Training Reference Guide 21
Council for Educational Development and Research 23
Curriculum Materials Clearinghouse 27
Educational Media Yearbook 32
Educational Products Information Exchange Institute 35
A Guide to the Evaluation of Educational Experiences in the Armed Forces 48
Human Resources Research Organization 51
Learning Resources Directory 53
Materials for Occupational Education 55
Science Teaching Center 67
Vocational Instructional Materials Available from Federal Agencies 74
Vocational Technical Learning Materials 77

5. Program Evaluation

Activities involved in evaluating the success of an instructional program fall in this category. The activity of choosing appropriate measures of student success is included here.

Clearinghouse for Applied Performance Testing 18
Education Index 29
Educational Resources Information Center 37
Educational Testing Service Test Collection 42
Encyclopedia of Educational Evaluation 44
Mental Measurements Yearbook 56

Note: The majority of information sources in the catalog are useful in a variety of information seeking activities. Placement of an information source in a particular category does not mean that the source is limited to this activity area, but that it has been rated by the authors as particularly significant in this activity area.

A more useful scheme following the above model would detail activities within each category and identify information resources with the more narrowly defined activities. This would require ratings by experienced users of the sources. If a feedback mechanism could be designed to collect and process the evaluations of users of this catalog, preliminary data for such an indexing scheme could be collected.